

Fire History and Climate Change
Bibliography (Author, Title) – re-Compiled October 12, 2011
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- Abatzoglou, John T., and Crystal A. Kolden. 2011. "Relative importance of weather and climate on wildfire growth in interior Alaska." *International Journal of Wildland Fire* 20 (4) (June): 479. doi:10.1071/WF10046.
- Aber, John, Ronald P. Neilson, Steve McNulty, James M. Lenihan, Dominique Bachelet, and Raymond J. Drapek. 2001. "Forest processes and global environmental change: Predicting the effects of individual and multiple stressors." *BioScience* 51 (9) (September): 735-751. doi:10.1641/0006-3568(2001)051[0735:FPAGEC]2.0.CO;2.
- Abrams, Marc D. 1985a. "Fire history of oak gallery forests in a northeast Kansas tallgrass prairie." *American Midland Naturalist* 114 (1) (July): 188–191.
- Abrams, Marc D., and Charles M. Ruffner. 1995. "Physiographic analysis of witness-tree distribution (1765–1798) and present forest cover through north central Pennsylvania." *Canadian Journal of Forest Research* 25 (4) (April): 659–668. doi:10.1139/x95-073.
- Abrams, Marc D. 1985b. "Fire history of oak gallery forests in a northeast Kansas tallgrass prairie." *American Midland Naturalist* 114 (1) (July): 188-191. doi:10.2307/2425255.
- . 1992. "Fire and the development of oak forests: In eastern North America, oak distribution reflects a variety of ecological paths and disturbance conditions." *BioScience* 42 (5) (May): 346–353.
- . 2000. Fire and the ecological history of oak forests in the eastern United States. In *Proceedings: Workshop on Fire, People, and the Central Hardwoods Landscape*, 46-55. General Technical Report NE-274. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northeastern Research Station, September. <http://www.treesearch.fs.fed.us/pubs/23075>.
- . 2005. "Prescribing fire in eastern oak forests: Is time running out?" *Northern Journal of Applied Forestry* 22 (3) (September): 190–196.
- Abrams, Marc D., and Gregory J. Nowacki. 1992. "Historical variation in fire, oak recruitment, and post-logging accelerated succession in central Pennsylvania." *Bulletin of the Torrey Botanical Club* 119 (1) (March): 19-28. doi:10.2307/2996916.
- . 2008. "Native Americans as active and passive promoters of mast and fruit trees in the eastern USA." *The Holocene* 18 (7) (November): 1123 -1137. doi:10.1177/0959683608095581.
- ACIA, Arctic Climate Impact Assessment. 2005. *Arctic climate impact assessment: Scientific report*. Cambridge, United Kingdom: Cambridge University Press. <http://amap.no/acia/>
- Ackerman, Edward A. 1941. "The Köppen classification of climates in North America." *Geographical Review* 31 (1) (January): 105–111.
- Adams, Jonathan M., and Hugues Faure. 1997. "Preliminary vegetation maps of the world since the last glacial maximum: An aid to archaeological understanding." *Journal of Archaeological Science* 24 (7) (July): 623-647. doi:10.1006/jasc.1996.0146.

Agee, James K. 2000. Wilderness fire science: A state-of-knowledge review. In *USDA Forest Service Proceedings RMRS-P-15-2000*, VOL-5.Wilderness ecosystems, threats, and management:5-22. Missoula, MT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.
<http://www.treesearch.fs.fed.us/pubs/21843>

Agee, James K. 1993. *Fire ecology of Pacific Northwest forests*. Washington, D.C.: Island Press.
<http://books.google.com/books?id=52x1XvcUA0AC&printsec=frontcover#v=onepage&q&f=false>

—. 1996. Fire regimes and approaches for determining fire history. In *The Use of Fire in Forest Restoration*, 12–13. General Technical Report INT-341. University of Washington, Seattle, September 14–16, 1995.: U.S. Department of Agriculture, Forest Service, Intermountain Research Station: Ogden, UT, June. <http://www.treesearch.fs.fed.us/pubs/28480>

—. 1998. “The landscape ecology of western forest fire regimes.” *Northwest Science* 72 (Special Issue 1): 24–34.

Agee, James K., and Carl N. Skinner. 2005. “Basic principles of forest fuel reduction treatments.” *Forest Ecology and Management* 211 (1-2) (June 6): 83–96. doi:10.1016/j.foreco.2005.01.034.

Albini, Frank A. 1976. *Estimating wildfire behavior and effects*. General Technical Report. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station.
<http://www.treesearch.fs.fed.us/pubs/29574>.

Aldrich, Serena R., Charles W. Lafon, Henri D. Grissino-Mayer, Georgina G. DeWeese, and Jennifer A. Hoss. 2010. “Three centuries of fire in montane pine-oak stands on a temperate forest landscape.” *Applied Vegetation Science* 13 (1) (February): 36-46. doi:10.1111/j.1654-109X.2009.01047.x.

Aldridge, George, David W. Inouye, Jessica R. K. Forrest, William A. Barr, and Abraham J. Miller-Rushing. 2011. “Emergence of a mid-season period of low floral resources in a montane meadow ecosystem associated with climate change.” *Journal of Ecology* 99 (4) (July): 905-913. doi:10.1111/j.1365-2745.2011.01826.x.

Alencar, Ane, Daniel Nepstad, and Maria del Carmen Vera Diaz. 2006. “Forest understory fire in the Brazilian Amazon in ENSO and non-ENSO years: Area burned and committed carbon emissions.” *Earth Interactions* 10 (6) (February): 1–17. doi:10.1175/EI150.1.

Alexander, George W. 1930. “Fire weather and fire climate.” *Monthly Weather Review* 58 (9) (September): 370-372. doi:10.1175/1520-0493(1930)58<370:FWAFC>2.0.CO;2.

Allen, Craig D., and David D. Breshears. 1998. “Drought-induced shift of a forest–woodland ecotone: Rapid landscape response to climate variation.” *Proceedings of the National Academy of Sciences* 95 (25) (December 8): 14839-14842.

Allen, Myles R., David J. Frame, Chris Huntingford, Chris D. Jones, Jason A. Lowe, Malte Meinshausen, and Nicolai Meinshausen. 2009. “Warming caused by cumulative carbon emissions towards the trillionth tonne.” *Nature* 458 (7242) (April 30): 1163-1166. doi:10.1038/nature08019.

Alley, Richard B., Paul A. Mayewski, Todd Sowers, Minze Stuiver, Kendrick C. Taylor, and Peter U. Clark. 1997. “Holocene climatic instability: A prominent, widespread event 8200 yr ago.” *Geology* 25 (6) (June): 483–486. doi:10.1130/0091-7613(1997)025<0483:HCIAPW>2.3.CO;2.

Alverson, Keith D., Raymond S. Bradley, and Thomas F. Pedersen, eds. 2003. *Paleoclimate, global change and the future*. 1st ed. The IGBP (International Geosphere-Biosphere Programme) Series. Verlag Berlin Heidelberg: Springer. <http://gidimap.giub.uni-bonn.de:9080/geomorph/themen/paleoclimate-global-change-and-the-future>

Ambrizzi, Tércio, Brian J. Hoskins, and Huang-Hsiung Hsu. 1995. "Rossby wave propagation and teleconnection patterns in the austral winter." *Journal of the Atmospheric Sciences* 52 (21) (November): 3661-3672. http://www.met.reading.ac.uk/~swr07rmf/Ambrizzi_Hoskins_Hsu_1995.pdf doi:10.1175/1520-0469(1995)052<3661:RWPATP>2.0.CO;2.

Ambrose, Stephen E. 1996. *Undaunted courage: Meriwether Lewis, Thomas Jefferson, and the opening of the American West*. 1st ed. New York, NY: Simon and Schuster, February.

<http://books.simonandschuster.com/Undaunted-Courage/Stephen-E-Ambrose/9780684811079>

Amiro, Brian D., Kimberley A. Logan, B. Mike Wotton, Michael D. Flannigan, J. Bernie Todd, Brian J. Stocks, and David L. Martell. 2004. "Fire weather index system components for large fires in the Canadian boreal forest." *International Journal of Wildland Fire* 13 (4) (December): 391-400. doi:10.1071/WF03066.

Anderson, Bruce T. 2011. "Near-term increase in frequency of seasonal temperature extremes prior to the 2°C global warming target." *Climatic Change* 108 (3) (October): 581-589. doi:10.1007/s10584-011-0196-4.

Anderson, Hal E. 1982. *Aids to determining fuel models for estimating fire behavior*. General Technical Report. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station, April. <http://www.treesearch.fs.fed.us/pubs/6447>

Anderson, Kevin, and Alice Bows. 2008. "Reframing the climate change challenge in light of post-2000 emission trends." *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 366 (1882) (November 13): 3863-3882. doi:10.1098/rsta.2008.0138.

Anderson, M. Kat, and Michael J. Moratto. 1996. Native American land-use practices and ecological impacts (Chapter 9). In *Sierra Nevada Ecosystem Project, II, Assessments and Scientific Basis for Management Options:187–206*. Final Report to Congress Report No. 36. Davis, CA.: University of California, Centers for Water and Wildland Resources. <http://ceres.ca.gov/snep/pubs/v2s2.html>

Anderson, R. Scott, and Scott L. Carpenter. 1991. "Vegetation changes in Yosemite Valley, Yosemite National Park, California, during the protohistoric period." *Madroño* 38 (1) (March): 1–13.

Anderson, R. Scott, Douglas J. Hallett, Edward E. Berg, Renata B. Jass, Jaime L. Toney, Christian S. de Fontaine, and Andrew DeVolder. 2006. "Holocene development of Boreal forests and fire regimes on the Kenai Lowlands of Alaska." *The Holocene* 16 (6) (September): 791–803. doi:10.1191/0959683606hol966rp.

Anderson, Roger C., James S. Fralish, and Jerry M. Baskin, eds. 1999. *Savannas, barrens, and rock outcrop plant communities of North America*. 1st ed. Cambridge, UK; New York, NY: Cambridge University Press. <http://ebooks.cambridge.org/ebook.jsf?bid=CBO9780511574627>

Anderson, Roger C., and Marlin L. Bowles. 1999. Deep-soil savannas and barrens of the Midwestern United States (Chapter 9). In *Savannas, Barrens, and Rock Outcrop Plant Communities of North America*,

- 155–170. 1st ed. Cambridge, UK; New York, NY: Cambridge University Press.
<http://ebooks.cambridge.org/chapter.jsf?bid=CBO9780511574627&cid=CBO9780511574627A020>
- Anon. 1981. *Fire regimes and ecosystem properties*. General Technical Report. Washington D.C.: USDA Forest Service, June. <http://lcnn.loc.gov/81603157>
- Anon. 2011. Glossary of Wildland Fire Terminology. National Wildfire Coordinating Group, May. <http://www.nwcc.gov/pms/pubs/glossary/index.htm>
- Anon. Use of NOAA ESRL data (CO₂). Ftp. ftp://ftp.cmdl.noaa.gov/ccg/co2/trends/co2_mm_mlo.txt.
- Archer, Steve. 1989. "Have southern Texas savannas been converted to woodlands in recent history?" *The American naturalist* 134 (4) (October): 545–561.
- Armour, Kyle C., and Gerard H. Roe. 2011. "Climate commitment in an uncertain world." *Geophysical Research Letters* 38 (1) (January): L01707 (5 p.). doi:10.1029/2010GL045850.
- Arndt, Derek S., Molly O. Baringer, and Michael R. Johnson, eds. 2010. "State of the climate in 2009." *Bulletin of the American Meteorological Society* 91 (7). State of the Climate (July): S1-S22. doi:10.1175/BAMS-91-7-StateoftheClimate.
- Arno, Stephen F., and George E. Gruell. 1983. "Fire history at the forest-grassland ecotone in southwestern Montana." *Journal of Range Management* 36 (3) (May): 332–336.
<http://www.jstor.org/stable/3898481>
- Arno, Stephen F. 1980. "Forest fire history in the northern Rockies." *Journal of Forestry* 78 (8) (August 1): 460-465.
- . 1996. The seminal importance of fire in ecosystem management-impetus for this publication. In *The Use of Fire in Forest Restoration*, 3–5. General Technical Report INT-341. University of Washington, Seattle, September 14-16, 1995.: U.S. Department of Agriculture, Forest Service, Intermountain Research Station: Ogden, UT, June. <http://www.treesearch.fs.fed.us/pubs/28478>
- Arora, Vivek K., and George J. Boer. 2005. "Fire as an interactive component of dynamic vegetation models." *Journal of Geophysical Research* 110 (G2) (November): G02008 (20 p.). doi:10.1029/2005JG000042.
- Arrhenius, Svante. 1908. *Worlds in the making; The evolution of the universe*. Trans. H. Borns. Illustrated. New York, London: Harper & Brothers Publishers.
<http://www.archive.org/details/worldsimmakingev00arrhrich>
- Ashe, William Willard. 1895. *Forest fires: Their destructive work, causes and prevention*. North Carolina Geological Survey, 1891-1925.: Bulletin Bulletin No. 7. Raleigh, J. Daniels, State Printer and Binder. <http://www.archive.org/details/forestfiresthei00ashegoog>
- Ashok, Karumuri, and Toshio Yamagata. 2009. "Climate change: The El Niño with a difference." *Nature* 461 (7263) (September 24): 481-484. doi:10.1038/461481a.
- Averyt, Kristen. 2010. "Are we successfully adapting science to climate change?" *Bulletin of the American Meteorological Society* 91 (6) (June): 723-726. doi:10.1175/2010BAMS2906.1.

Aydin, Murat, Kristal R. Verhulst, Eric S. Saltzman, Mark O. Battle, Stephen A. Montzka, Donald R. Blake, Qi Tang, and Michael J. Prather. 2011. "Recent decreases in fossil-fuel emissions of ethane and methane derived from firn air." *Nature* 476 (7359) (August 11): 198-201. doi:10.1038/nature10352.

Bailey, Andrew D., Robert Mickler, and Cecil Frost. 2007. Presettlement fire regime and vegetation mapping in Southeastern Coastal Plain forest ecosystems. In *The Fire Environment—Innovations, Management, and Policy: Proceedings of a Conference*, 275–286. Destin, FL.: USDA Forest Service Proceedings RMRS-P-46CD. September 2007. Rocky Mountain Research Station: Fort Collins, CO, March 26. <http://www.treesearch.fs.fed.us/pubs/28568>

Bailey, Robert G., and Howard C. Hogg. 1986. "A world ecoregions map for resource reporting." *Environmental Conservation* 13 (3): 195-202. doi:10.1017/S0376892900036237.

Bailey, Robert G. 1983. "Delineation of ecosystem regions." *Environmental Management* 7 (4) (July): 365-373. doi:10.1007/BF01866919.

———. 1985. "The factor of scale in ecosystem mapping." *Environmental Management* 9 (4) (July): 271-275. doi:10.1007/BF01867299.

———. 2002. *Ecoregion-based design for sustainability*. 1st ed. New York, NY: Springer-Verlag. <http://www.springer.com/environment/environment+management/book/978-0-387-95430-1>

———. 2004. "Identifying ecoregion boundaries." *Environmental Management* 34 (Supplement 1) (April): 14–26. doi:10.1007/s00267-003-0163-6.

———. 2005. Fire regimes in different regional ecosystems and their management implications. Geography and Sustainability presented at the The Annual Meeting of the Association of American Geographers (AAG), April 5, Denver, CO. <http://www.fs.fed.us/rm/ecoregions/publications/papers-presentations/>

———. 2006. Research applications of ecosystem patterns. In *Proceedings of the Eighth Annual Forest Inventory and Analysis Symposium*, 83-90. General Technical Report WO-79. Monterey, CA.: U.S. Department of Agriculture, Forest Service: Washington, DC, October 16. <http://www.treesearch.fs.fed.us/pubs/17256>

———. 2008. Description of the ecoregions of the United States. <http://www.fs.fed.us/land/ecosysmgmt/index.html>

———. 2009. Ecoregions of the United States - Ecoregions - RMRS - US Forest Service. *Ecoregions of the United States*. <http://www.fs.fed.us/rm/ecoregions/products/map-ecoregions-united-states/>

———. 2010. *Fire regimes and ecoregions (Chapter 2)*. General Technical Report. Cumulative watershed effects of fuel management in the western United States. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, January. <http://www.treesearch.fs.fed.us/pubs/contents/34301>

Baisan, Christopher H., and Thomas W. Swetnam. 1990. "Fire history on a desert mountain range: Rincon Mountain Wilderness, Arizona, USA." *Canadian Journal of Forest Research* 20 (10) (October): 1559–1569. doi:10.1139/x90-208.

Baker, Richard G., E. Arthur Bettis III, Rhawn F. Denniston, Luis A. Gonzalez, Laura E. Strickland, and Joseph R. Krieg. 2002. "Holocene paleoenvironments in southeastern Minnesota chasing the prairie-forest ecotone." *Palaeogeography, Palaeoclimatology, Palaeoecology* 177 (1-2) (January 5): 103-122. doi:10.1016/S0031-0182(01)00354-6.

Baker, William L. 2003. Fires and climate in forested landscapes of the US Rocky Mountains (Chapter 5). In *Fire and Climatic Change in Temperate Ecosystems of the Western Americas*, 160:120–157. 1st ed. Ecological Studies. New York, NY: Springer-Verlag.
<http://www.springerlink.com/content/n112363k1wh83lg3/>

Baker, William L. 1992. "Effects of settlement and fire suppression on landscape structure." *Ecology* 73 (5) (October): 1879–1887. doi:10.2307/1940039.

Baker, William L., and Donna Ehle. 2001. "Uncertainty in surface-fire history: The case of ponderosa pine forests in the western United States." *Canadian Journal of Forest Research* 31 (7) (July): 1205–1226. doi:10.1139/cjfr-31-7-1205.

Baker, William L., and Thomas T. Veblen. 1990. "Spruce beetles and fires in the nineteenth-century subalpine forests of western Colorado, U.S.A." *Arctic and Alpine Research* 22 (1) (February): 65-80. doi:10.2307/1551721.

Baker, W.L., and D.J. Shinneman. 2004. "Fire and restoration of pinon-juniper woodlands in the western United States: a review." *Forest Ecology and Management* 189: 1–21.

Balshi, Michael S., A. David McGuire, Paul Duffy, Michael Flannigan, David W. Kicklighter, and Jerry Melillo. 2009. "Vulnerability of carbon storage in North American boreal forests to wildfires during the 21st century." *Global Change Biology* 15 (6) (June): 1491-1510. doi:10.1111/j.1365-2486.2009.01877.x.

Balshi, Michael S., A. David McGuire, Paul Duffy, Mike Flannigan, John Walsh, and Jerry Melillo. 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* 15 (3) (March): 578-600. doi:10.1111/j.1365-2486.2008.01679.x.

Barden, Lawrence S. 1997. "Historic prairies in the Piedmont of North and South Carolina, USA." *Natural Areas Journal* 17 (2) (April): 149–152.

Baron, Jill S., Lance Gunderson, Craig D. Allen, Erica Fleishman, Donald McKenzie, Laura A. Meyerson, Jill Oropenza, and Nate Stephenson. 2009. "Options for National Parks and Reserves for Adapting to Climate Change." *Environmental Management* 44 (May 16): 1033-1042. doi:10.1007/s00267-009-9296-6.

Barrett, Stephen W., and Stephen F. Arno. 1982. "Indian fires as an ecological influence in the Northern Rockies." *Journal of Forestry* 80 (10) (October): 647-651.

Barrett, Stephen W., Doug Havlina, Jeffrey L. Jones, Wendel J. Hann, Christine K. Frame, Dale Hamilton, Kathy Schon, Thomas E. Demeo, Lee C. Hutter, and James P. Menakis. 2010. Interagency Fire Regime Condition Class (FRCC) guidebook. Version 3.0. USDA Forest Service, US Department of the Interior, and The Nature Conservancy, September. Fire and Research Management Exchange System (FRAMES).

http://www.fire.org/niftt/released/FRCC_Guidebook_2010_final.pdf

- Barriopedro, David, Erich M. Fischer, Jürg Luterbacher, Ricardo M. Trigo, and Ricardo Garcia-Herrera. 2011. "The hot summer of 2010: Redrawing the temperature record map of Europe." *Science* 332 (6026) (April 8): 220-224. doi:10.1126/science.1201224.
- Barro, Susan C., and Susan G. Conard. 1991. "Fire effects on California chaparral systems: An overview." *Environment International* 17 (2-3): 135-149. doi:10.1016/0160-4120(91)90096-9.
- Bartlein, Patrick J., Steven W. Hostetler, Sarah L. Shafer, Justin O. Holman, and Allen M. Solomon. 2008. "Temporal and spatial structure in a daily wildfire-start data set from the western United States (1986-96)." *International Journal of Wildland Fire* 17 (1) (February): 8-17. doi:10.1071/WF07022.
- Bartlein, Patrick J., I. Colin Prentice, and Thompson Webb III. 1986. "Climatic response surfaces from pollen data for some eastern North American taxa." *Journal of Biogeography* 13 (1) (January): 35-57.
- Batek, Michael J., Alan J. Rebertus, Walter A. Schroeder, Timothy L. Haithcoat, Eric Compas, and Richard P. Guyette. 1999. "Reconstruction of early nineteenth-century vegetation and fire regimes in the Missouri Ozarks." *Journal of Biogeography* 26 (2) (March): 397-412. doi:10.1046/j.1365-2699.1999.00292.x.
- Beal, Lisa M., Wilhelmus P. M. De Ruijter, Arne Biastoch, Rainer Zahn, Meghan Cronin, Juliet Hermes, Johann Lutjeharms, et al. 2011. "On the role of the Agulhas system in ocean circulation and climate." *Nature* 472 (7344) (April 28): 429-436. doi:10.1038/nature09983.
- Beals, Edward A. 1916. "Droughts and hot weather." *Monthly Weather Review* 44 (3) (March): 135-138. doi:10.1175/1520-0493(1916)44<135:DAHW>2.0.CO;2.
- Beals, Edward A. 1914. "The value of weather forecasts in the problem of protecting forests from fire." *Monthly Weather Review* 42 (2) (February): 111-119. doi:10.1175/1520-0493(1914)42<111:TVOWFI>2.0.CO;2.
- Beaty, R. Matthew, and Alan H. Taylor. 2001. "Spatial and temporal variation of fire regimes in a mixed conifer forest landscape, Southern Cascades, California, USA." *Journal of Biogeography* 28 (8) (August): 955-966. doi:10.1046/j.1365-2699.2001.00591.x.
- . 2009. "A 14 000 year sedimentary charcoal record of fire from the northern Sierra Nevada, Lake Tahoe Basin, California, USA." *The Holocene* 19 (3) (May): 347-358. doi:10.1177/0959683608101386.
- Beaubien, Elisabeth, and Andreas Hamann. 2011. "Spring flowering response to climate change between 1936 and 2006 in Alberta, Canada." *BioScience* 61 (7) (July): 514-524. doi:10.1525/bio.2011.61.7.6.
- Bebi, P., D. Kulakowski, and T.T. Veblen. 2003. "Interactions between fire and spruce beetles in a subalpine Rocky Mountain forest landscape." *The Bark Beetles, Fuels, and Fire Bibliography*: 20.
- Beck, Christoph, Jürgen Grieser, Markus Kottke, Franz Rubel, and Bruno Rudolf. 2005. "Characterizing global climate change by means of Köppen Climate Classification." *Deutscher Wetterdienst(DWD), Klimastatusbericht* (Klimastatusbericht 2005): 139-149.
- Beckage, Brian, William J. Platt, Matthew G. Slocum, and Bob Panko. 2003. "Influence of the El Niño Southern Oscillation on fire regimes in the Florida Everglades." *Ecology* 84 (12) (December): 3124-3130. doi:10.1890/02-0183.

Beerling, David J., and Colin P. Osborne. 2006. "The origin of the savanna biome." *Global Change Biology* 12 (11) (November): 2023-2031. doi:10.1111/j.1365-2486.2006.01239.x.

Belcher, Claire M., Luke Mander, Guillermo Rein, Freddy X. Jervis, Matthew Haworth, Stephen P. Hesselbo, Ian J. Glasspool, and Jennifer C. McElwain. 2010. "Increased fire activity at the Triassic/Jurassic boundary in Greenland due to climate-driven floral change." *Nature Geoscience* 3 (6) (June): 426-429. doi:10.1038/ngeo871.

Benson, Randall P., John O. Roads, and David R. Weise. 2008. Climatic and weather factors affecting fire occurrence and behavior (Chapter 2). In *Developments in Environmental Science: Wildland Fires and Air Pollution*, 8:37-59. 1st ed. Developments in Environmental Science. Amsterdam: Elsevier, October. <http://linkinghub.elsevier.com/retrieve/pii/S1474817708000028>

Bergeron, Yves, and Sylvain Archambault. 1993. "Decreasing frequency of forest fires in the southern boreal zone of Québec and its relation to global warming since the end of the 'Little Ice Age'." *The Holocene* 3 (3) (September): 255-259. doi:10.1177/095968369300300307.

Bergeron, Yves, and Jacques Brisson. 1990. "Fire regime in red pine stands at the northern limit of the species' range." *Ecology* 71 (4) (August): 1352-1364.

Bergeron, Yves, and Pierre-René Dansereau. 1993. "Predicting the composition of Canadian southern boreal forest in different fire cycles." *Journal of Vegetation Science* 4 (6) (December): 827-832. doi:10.2307/3235621.

Bergeron, Yves, Dominic Cyr, Martin P. Girardin, and Christopher Carcaillet. 2010. "Will climate change drive 21st century burn rates in Canadian boreal forest outside of its natural variability: Collating global climate model experiments with sedimentary charcoal data." *International Journal of Wildland Fire* 19 (8) (December): 1127-1139. doi:10.1071/WF09092.

Bergeron, Yves, Alain Leduc, Brian D. Harvey, and Sylvie Gauthier. 2002. "Natural fire regime: A guide for sustainable management of the Canadian boreal forest." *Silva Fennica* 36 (1): 81-95.

Berner, Robert A., and Donald E. Canfield. 1989. "A new model for atmospheric oxygen over Phanerozoic time." *American Journal of Science* 289 (4) (April): 333-361. doi:10.2475/ajs.289.4.333.

Bessie, W. C., and Edward A. Johnson. 1995. "The relative importance of fuels and weather on fire behavior in subalpine forests." *Ecology* 76 (3) (April): 747-762. doi:10.2307/1939341.

Betts, Richard A., Matthew Collins, Deborah L. Hemming, Chris D. Jones, Jason A. Lowe, and Michael G. Sanderson. 2011. "When could global warming reach 4° C?" *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 369 (1934) (January 13): 67-84. doi:10.1098/rsta.2010.0292.

Bijl, Peter K., Alexander J. P. Houben, Stefan Schouten, Steven M. Bohaty, Appy Sluijs, Gert-Jan Reichart, Jaap S. Sinninghe Damste, and Henk Brinkhuis. 2010. "Transient middle Eocene atmospheric CO₂ and temperature variations." *Science* 330 (6005) (November 5): 819-821. doi:10.1126/science.1193654.

Biondi, Franco, Alexander Gershunov, and Daniel R. Cayan. 2001. "North Pacific decadal climate variability since 1661." *Journal of Climate* 14 (1) (January): 5-10. doi:10.1175/1520-0442(2001)014<0005:NPDCVS>2.0.CO;2.

Bird, Broxton W., Mark B. Abbott, Mathias Vuille, Donald T. Rodbell, Nathan D. Stansell, and Michael F. Rosenmeier. 2011. "A 2,300-year-long annually resolved record of the South American summer monsoon from the Peruvian Andes." *Proceedings of the National Academy of Sciences* 108 (21) (May 24): 8583-8588. doi:10.1073/pnas.1003719108.

Blunden, Jessica, Derek S. Arndt, and Molly O. Baringer, eds. 2011. "State of the climate in 2010." *Bulletin of the American Meteorological Society* 92 (6). State of the Climate (June): S1-S236. doi:10.1175/1520-0477-92.6.S1.

Boby, Leslie A., Edward A. G. Schuur, Michelle C. Mack, David Verbyla, and Jill F. Johnstone. 2010. "Quantifying fire severity, carbon, and nitrogen emissions in Alaska's boreal forest." *Ecological Applications* 20 (6) (September): 1633-1647. doi:10.1890/08-2295.1.

Boden, Thomas A., Gregg Marland, and Robert J. Andres. 2009. "Global, regional, and national fossil-fuel CO₂ emissions." *Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, USA. Oak Ridge, TN: Department of Energy*. doi:10.3334/CDIAC/00001.

http://cdiac.ornl.gov/trends/emis/overview_2006.html

de Boer, Hugo Jan, Emmy I. Lammertsma, Friederike Wagner-Cremer, David L. Dilcher, Martin J. Wassen, and Stefan C. Dekker. 2011. "Climate forcing due to optimization of maximal leaf conductance in subtropical vegetation under rising CO₂." *Proceedings of the National Academy of Sciences* 108 (10) (March 8): 4041-4046. doi:10.1073/pnas.1100555108.

Bonan, Gordon B. 2008. "Forests and climate change: Forcings, feedbacks, and the climate benefits of forests." *Science* 320 (5882) (June 13): 1444-1449. doi:10.1126/science.1155121.

Bond, William J., and Jon E. Keeley. 2005. "Fire as a global 'herbivore': The ecology and evolution of flammable ecosystems." *Trends in Ecology and Evolution* 20 (7) (July): 387-394. doi:10.1016/j.tree.2005.04.025.

Bond, William J., F. Ian Woodward, and Guy F. Midgley. 2005. "The global distribution of ecosystems in a world without fire." *New Phytologist* 165 (2) (February): 525-538. doi:10.1111/j.1469-8137.2004.01252.x.

Bond-Lamberty, Ben, Scott D. Peckham, Douglas E. Ahl, and Stith T. Gower. 2007. "Fire as the dominant driver of central Canadian boreal forest carbon balance." *Nature* 450 (7166) (November 1): 89-92. doi:10.1038/nature06272.

Bonnicksen, Thomas M. 2000. *America's ancient forests: From the ice age to the age of discovery*. 1st ed. New York, Chichester, Brisbane, Toronto, Singapore, Weinheim: John Wiley and Sons, January. <http://www.wiley.com/WileyCDA/WileyTitle/productCd-0471136220.html>

Bork, Joyce L. 1984. Fire history in three vegetation types on the eastern side of the Oregon Cascades. Ph.D. Dissertation, Corvallis, OR: Oregon State University, June. <http://scholarsarchive.library.oregonstate.edu/xmlui/handle/1957/10122>

Bosworth, Dale, and Hutch Brown. 2007. "Investing in the future: Ecological restoration and the USDA Forest Service." *Journal of Forestry* 105 (4) (June): 208-212.

Bowerman, Niel H. A., David J. Frame, Chris Huntingford, Jason A. Lowe, and Myles R. Allen. 2011. "Cumulative carbon emissions, emissions floors and short-term rates of warming: Implications for

policy." *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 369 (1934) (January 13): 45-66. doi:10.1098/rsta.2010.0288.

Bowman, D. M. J. S., Jennifer K. Balch, Paulo Artaxo, William J. Bond, Jean M. Carlson, Mark A. Cochrane, Carla M. D'Antonio, et al. 2009. "Fire in the Earth System." *Science* 324 (5926) (April 24): 481-484. doi:10.1126/science.1163886.

Bowman, David M. J. S., and Simon G. Haberle. 2010. "Paradise burnt: How colonizing humans transform landscapes with fire." *Proceedings of the National Academy of Sciences* 107 (50) (December 14): 21234 - 21235. doi:10.1073/pnas.1016393108.

Bowman, David M. J. S., Jennifer Balch, Paulo Artaxo, William J. Bond, Mark A. Cochrane, Carla M. D'Antonio, Ruth DeFries, et al. 2011. "The human dimension of fire regimes on Earth." *Journal of Biogeography* first published online (?) (September 14): 14 p. doi:10.1111/j.1365-2699.2011.02595.x.

Boyd, Matthew. 2002. "Identification of anthropogenic burning in the paleoecological record of the northern Prairies: A new approach." *Annals of the Association of American Geographers* 92 (3) (September): 471-487. doi:10.1111/1467-8306.00300.

Bradley, Raymond S. 1999. *Paleoclimatology: Reconstructing climates of the Quaternary*. 1st ed. International geophysics series. San Diego, California; London: Academic Press.
<http://www.geo.umass.edu/climate/paleo/html/>

Bradshaw, Larry S., John E. Deeming, Robert E. Burgan, and Jack D. Cohen. 1984. *The 1978 national fire-danger rating system: technical documentation*. General Technical Report. Ogden, UT: US Dept. of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station.
<http://www.treesearch.fs.fed.us/pubs/29615>

Bradshaw, Richard H. W., Matts Lindbladh, and Gina E. Hannon. 2010. "The role of fire in southern Scandinavian forests during the late Holocene." *International Journal of Wildland Fire* 19 (8) (December): 1040–1049. doi:10.1071/WF09108.

Bradshaw, S. Don, Kingsley W. Dixon, Stephen D. Hopper, Hans Lambers, and Shane R. Turner. 2011. "Little evidence for fire-adapted plant traits in Mediterranean climate regions." *Trends in Plant Science* 16 (2) (February): 69-76. doi:10.1016/j.tplants.2010.10.007.

Bradstock, R. A., M. Bedward, Belinda J. Kenny, and Judith Scott. 1998. "Spatially-explicit simulation of the effect of prescribed burning on fire regimes and plant extinctions in shrublands typical of south-eastern Australia." *Biological Conservation* 86 (1) (October): 83-95. doi:10.1016/S0006-3207(97)00170-5.

Bradstock, Ross A., Janet S. Cohn, A. Malcolm Gill, Michael Bedward, and Christopher Lucas. 2009. "Prediction of the probability of large fires in the Sydney region of south-eastern Australia using fire weather." *International Journal of Wildland Fire* 18 (8) (December): 932-943. doi:10.1071/WF08133.

Bradstock, Ross Andrew, Jann E. Williams, and Malcolm A. Gill, eds. 2002. *Flammable Australia: The fire regimes and biodiversity of a continent*. illustrated. Cambridge, United Kingdom: Cambridge University Press. <http://catalogue.nla.gov.au/Record/1570054>

Bragg, Thomas B. 1982. "Seasonal variations in fuel and fuel consumption by fires in a bluestem prairie." *Ecology* 63 (1) (February): 7–11. doi:10.2307/1937024.

- Bremond, Laurent, Christopher Carcaillet, Charly Favier, Adam A. Ali, Cédric Paitre, Yves Bégin, Yves Bergeron, and Pierre J. H. Richard. 2010. "Effects of vegetation zones and climatic changes on fire-induced atmospheric carbon emissions: A model based on paleodata." *International Journal of Wildland Fire* 19 (8) (December): 1015–1025. doi:10.1071/WF09096.
- Brenner, Jim. 1991. "Southern Oscillation anomalies and their relationship to wildfire activity in Florida." *International Journal of Wildland Fire* 1 (1) (January): 73–78. doi:10.1071/WF9910073.
- Briggs, John M., and Alan K. Knapp. 1995. "Interannual variability in primary production in tallgrass prairie: Climate, soil moisture, topographic position, and fire as determinants of aboveground biomass." *American Journal of Botany* 82 (8) (August): 1024–1030. doi:10.2307/2446232.
- Briles, Christy E., Cathy Whitlock, Patrick J. Bartlein, and Philip Higuera. 2008. "Regional and local controls on postglacial vegetation and fire in the Siskiyou Mountains, northern California, USA." *Palaeogeography, Palaeoclimatology, Palaeoecology* 265 (1-2) (July 31): 159–169. doi:10.1016/j.palaeo.2008.05.007.
- Briles, Christy E., Cathy Whitlock, and Patrick J. Bartlein. 2005. "Postglacial vegetation, fire, and climate history of the Siskiyou Mountains, Oregon, USA." *Quaternary Research* 64 (1) (July): 44–56. doi:10.1016/j.yqres.2005.03.001.
- Brohan, Philip, John J. Kennedy, Ian Harris, Simon F. B. Tett, and Phil D. Jones. 2006. "Uncertainty estimates in regional and global observed temperature changes: A new data set from 1850." *Journal of Geophysical Research* 111 (12) (June): D12106 (21 p.). doi:10.1029/2005JD006548.
- Brooks, M.L., and D.A. Pyke. 2000. Invasive plants and fire in the deserts of North America. In *Proceedings of the invasive species workshop: the role of fire in the control and spread of invasive species. Fire Conference*, 1–14.
- Brooks, Matthew L., Carla M. D'antonio, David M. Richardson, James B. Grace, Jon E. Keeley, Joseph M. Ditomaso, Richard J. Hobbs, Mike Pellatt, and David Pyke. 2004. "Effects of invasive alien plants on fire regimes." *BioScience* 54 (7) (July): 677–688. doi:10.1641/0006-3568(2004)054[0677:EOIAPO]2.0.CO;2.
- Brose, Patrick H., and Thomas A. Waldrop. 2006. "Fire and the origin of Table Mountain pine–pitch pine communities in the southern Appalachian Mountains, USA." *Canadian Journal of Forest Research* 36 (3) (March): 710–718. doi:10.1139/X05-281.
- Brose, Patrick H., Thomas M. Schuler, David H. Van Lear, and John Berst. 2001. "Bringing fire back: The changing regimes of the Appalachian mixed-oak forests." *Journal of Forestry* 99 (11) (November): 30–35.
- Brovkin, Victor, Andrei Ganopolski, and Yuri Svirszhev. 1997. "A continuous climate-vegetation classification for use in climate-biosphere studies." *Ecological Modelling* 101 (2-3) (August 15): 251–261. doi:10.1016/S0304-3800(97)00049-5.
- Brovkin, Victor, Stephen Sitch, Werner von Bloh, Martin Claussen, Eva Bauer, and Wolfgang Cramer. 2004. "Role of land cover changes for atmospheric CO₂ increase and climate change during the last 150 years." *Global Change Biology* 10 (8) (August): 1253–1266. doi:10.1111/j.1365-2486.2004.00812.x.
- Brown Jr., James H. 1960. "The role of fire in altering the species composition of forests in Rhode Island." *Ecology* 41 (2) (April): 310–316. doi:10.2307/1930221.

Brown, James K., and Jane Kapler Smith. 2000. *Wildland fire in ecosystems: Effects of fire on flora*. General Technical Report. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, December. <http://www.treesearch.fs.fed.us/pubs/4554>

Brown, Kendrick J., and Richard J. Hebda. 2002. "Origin, development, and dynamics of coastal temperate conifer rainforests of southern Vancouver Island, Canada." *Canadian Journal of Forest Research* 32 (2) (February): 353-372. doi:10.1139/x01-197.

Brown, Kendrick J., James S. Clark, Eric C. Grimm, Joe J. Donovan, Pietra G. Mueller, Barbara C. S. Hansen, and Ivanka Stefanova. 2005. "Fire cycles in North American interior grasslands and their relation to prairie drought." *Proceedings of the National Academy of Sciences* 102 (25) (June 21): 8865–8870. doi:10.1073/pnas.0503621102.

Brown, Peter M., and Carolyn Hull Sieg. 1996. "Fire history in interior ponderosa pine communities of the Black Hills, South Dakota, USA." *International Journal of Wildland Fire* 6 (3): 97–105. doi:10.1071/WF9960097.

Brown, Peter M., Merrill R. Kaufmann, and Wayne D. Shepperd. 1999. "Long-term, landscape patterns of past fire events in a montane ponderosa pine forest of central Colorado." *Landscape Ecology* 14 (6) (December): 513–532. doi:10.1023/A:1008137005355.

Brown, Peter M., Margot W. Kaye, Laurie S. Huckaby, and Christopher H. Baisan. 2001. "Fire history along environmental gradients in the Sacramento Mountains, New Mexico: Influences of local patterns and regional processes." *Ecoscience* 8 (1): 115–126.

Brown, Peter M., Michael G. Ryan, and Thomas G. Andrews. 2000. "Historical surface fire frequency in ponderosa pine stands in research natural areas, central Rocky Mountains and Black Hills, USA." *Natural Areas Journal* 20 (2) (April): 133–139.

Brown, Peter M., and Rosalind Wu. 2005. "Climate and disturbance forcing of episodic tree recruitment in a southwestern ponderosa pine landscape." *Ecology* 86 (11) (November): 3030–3038. doi:10.1890/05-0034.

Brown, Peter M., Emily K. Heyerdahl, Stanley G. Kitchen, and Marc H. Weber. 2008. "Climate effects on historical fires (1630–1900) in Utah." *International Journal of Wildland Fire* 17 (1) (February): 28-39. doi:10.1071/WF07023.

Brubaker, Linda B., Philip E. Higuera, T. Scott Rupp, Mark A. Olson, Patricia M. Anderson, and Feng Sheng Hu. 2009. "Linking sediment-charcoal records and ecological modeling to understand causes of fire-regime change in boreal forests." *Ecology* 90 (7) (July): 1788-1801. doi:10.1890/08-0797.1.

Brunelle, Andrea, and R. Scott Anderson. 2003. "Sedimentary charcoal as an indicator of late-Holocene drought in the Sierra Nevada, California, and its relevance to the future." *The Holocene* 13 (1) (January): 21–28. doi:10.1191/0959683603hl591rp.

Brunelle, Andrea, and Cathy Whitlock. 2003. "Postglacial fire, vegetation, and climate history in the Clearwater Range, Northern Idaho, USA." *Quaternary Research* 60 (3) (November): 307-318. doi:10.1016/j.yqres.2003.07.009.

- Brunelle, Andrea, Cathy Whitlock, Patrick Bartlein, and Kurt Kipfmüller. 2005. "Holocene fire and vegetation along environmental gradients in the Northern Rocky Mountains." *Quaternary Science Reviews* 24 (20-21) (November): 2281-2300. doi:10.1016/j.quascirev.2004.11.010.
- Brunet, Manola, and Phil Jones. 2011. "Data rescue initiatives: Bringing historical climate data into the 21st century." *Climate Research* 47 (1-2) (March): 29-40. doi:10.3354/cr00960.
- Buechling, Arne, and William L. Baker. 2004. "A fire history from tree rings in a high-elevation forest of Rocky Mountain National Park." *Canadian Journal of Forest Research* 34 (6) (June): 1259-1273. doi:10.1139/x04-012.
- Büntgen, Ulf, Willy Tegel, Kurt Nicolussi, Michael McCormick, David Frank, Valerie Trouet, Jed O. Kaplan, et al. 2011. "2500 years of European climate variability and human susceptibility." *Science* 331 (6017) (February 4): 578-582. doi:10.1126/science.1197175.
- Burgman, Robert, Richard Seager, Amy Clement, and Celine Herweijer. 2010. "Role of tropical Pacific SSTs in global medieval hydroclimate: A modeling study." *Geophysical Research Letters* 37 (6) (March): L06705 (6 p.). doi:10.1029/2009GL042239.
- Burkhardt, J. Wayne, and Edwin W. Tisdale. 1976. "Causes of juniper invasion in southwestern Idaho." *Ecology* 57 (3) (May): 472-484. doi:10.2307/1936432.
- Busenberg, George. 2004. "Wildfire management in the United States: The evolution of a policy failure." *Review of Policy Research* 21 (2) (March): 145-156. doi:10.1111/j.1541-1338.2004.00066.x.
- Cadena, Carlos Daniel, Kenneth H. Kozak, Juan Pablo Gomez, Juan Luis Parra, Christy M. McCain, Rauri C. K. Bowie, Ana C. Carnaval, et al. 2011. "Latitude, elevational climatic zonation and speciation in New World vertebrates." *Proceedings of the Royal Society B: Biological Sciences* Published online before print (June 1). doi:10.1098/rspb.2011.0720.
<http://rspb.royalsocietypublishing.org/cgi/doi/10.1098/rspb.2011.0720>
- Calkin, David E., Krista M. Gebert, J. Greg Jones, and Ronald P. Neilson. 2005. "Forest Service large fire area burned and suppression expenditure trends, 1970-2002." *Journal of Forestry* 103 (4) (June): 179-183.
- Camill, Philip, Charles E. Umbanhowar Jr., Rebecca Teed, Christoph E. Geiss, Jessica Aldinger, Leah Dvorak, Jon Kenning, Jacob Limmer, and Kristina Walkup. 2003. "Late-glacial and Holocene climatic effects on fire and vegetation dynamics at the prairie-forest ecotone in south-central Minnesota." *Journal of Ecology* 91 (5) (October): 822-836. doi:10.1046/j.1365-2745.2003.00812.x.
- Cane, Mark A. 1983. "Oceanographic events during El Niño." *Science* 222 (4629) (December 16): 1189-1195. doi:10.1126/science.222.4629.1189.
- Carcaillet, Christopher, Heather Almquist, Hans Asnong, Richard H. W. Bradshaw, José S. Carrión, Marie-Jose Gaillard, Konrad Gajewski, et al. 2002. "Holocene biomass burning and global dynamics of the carbon cycle." *Chemosphere* 49 (8) (December): 845-863. doi:10.1016/S0045-6535(02)00385-5.
- Carcaillet, Christopher, Yves Bergeron, Pierre J. H. Richard, Bianca Fréchette, Sylvie Gauthier, and Yves T. Prairie. 2001. "Change of fire frequency in the eastern Canadian boreal forests during the Holocene: Does vegetation composition or climate trigger the fire regime?" *Journal of Ecology* 89 (6) (December): 930-946. doi:10.1111/j.1365-2745.2001.00614.x.

Carcaillet, Christopher, Pierre J. H. Richard, Yves Bergeron, Bianca Fréchette, and Adam A. Ali. 2010. "Resilience of the boreal forest in response to Holocene fire-frequency changes assessed by pollen diversity and population dynamics." *International Journal of Wildland Fire* 19 (8) (December): 1026–1039. doi:10.1071/WF09097.

Carmona-Moreno, Cesar, Alan Belward, Jean-Paul Malingreau, Andrew Hartley, Maria Garcia-Alegre, Mikhail Antonovskiy, Victor Buchshtaber, and Victor Pivovarov. 2005. "Characterizing interannual variations in global fire calendar using data from Earth observing satellites." *Global Change Biology* 11 (9) (September): 1537-1555. doi:10.1111/j.1365-2486.2005.01003.x.

Carril, Andrea F., Silvio Gualdi, Annalisa Cherchi, and Antonio Navarra. 2008. "Heatwaves in Europe: Areas of homogeneous variability and links with the regional to large-scale atmospheric and SSTs anomalies." *Climate Dynamics* 30 (1) (January): 77-98. doi:10.1007/s00382-007-0274-5.

Carroll, Wayne D., Peter R. Kapeluck, Richard A. Harper, and David H. Van Lear. 2002. *Background paper: Historical overview of the southern forest landscape and associated resources (Chapter 24)*. General Technical Report. Southern forest resource assessment. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station.

<http://www.srs.fs.usda.gov/sustain/report/index.htm>
<http://www.srs.fs.usda.gov/sustain/report/histry/histry.htm>

Cary, Geoffrey J., Mike D. Flannigan, Robert E. Keane, Ross A. Bradstock, Ian D. Davies, James M. Lenihan, Chao Li, Kimberley A. Logan, and Russell A. Parsons. 2009. "Relative importance of fuel management, ignition management and weather for area burned: Evidence from five landscape–fire–succession models." *International Journal of Wildland Fire* 18 (2) (April): 147-156. doi:10.1071/WF07085.

Cary, Geoffrey J., Robert E. Keane, Robert H. Gardner, Sandra Lavorel, Michael D. Flannigan, Ian D. Davies, Chao Li, James M. Lenihan, T. Scott Rupp, and Florent Mouillot. 2006. "Comparison of the sensitivity of landscape-fire-succession models to variation in terrain, fuel pattern, climate and weather." *Landscape Ecology* 21 (1) (January): 121–137. doi:10.1007/s10980-005-7302-9.

Cayan, Daniel R., Tapash Das, David W. Pierce, Tim P. Barnett, Mary Tyree, and Alexander Gershunov. 2010. "Future dryness in the southwest US and the hydrology of the early 21st century drought." *Proceedings of the National Academy of Sciences* 107 (50) (December 14): 21271 -21276. doi:10.1073/pnas.0912391107.

CDIAC. 2003. Trends Online: A compendium of data on global change. Data provide. *Trends Online Contents*. <http://cdiac.ornl.gov/trends/trends.htm>

Chandler, Craig C., Phillip Cheney, Philip Thomas, Louis V. Trabaud, and Dave J. Williams. 1983. *Fire in forestry: Volume 1. Forest fire behavior and effects*. Vol. 1. 2 vols. New York, NY: John Wiley & Sons, INC.
<http://md1.csa.com/partners/viewrecord.php?requester=gs&collection=ENV&recid=581831&q=&uid=790761025&setcookie=yes>

Chapin III, F. Stuart, George M. Woodwell, James T. Randerson, Edward B. Rastetter, Gary M. Lovett, Dennis D. Baldocchi, Deborah A. Clark, et al. 2006. "Reconciling carbon-cycle concepts, terminology, and methods." *Ecosystems* 9 (7) (November): 1041-1050. doi:10.1007/s10021-005-0105-7.

Chapin III, F. Stuart, A. David McGuire, Roger W. Ruess, Teresa N. Hollingsworth, Michelle C. Mack, Jill F. Johnstone, Eric S. Kasischke, et al. 2010. "Resilience of Alaska's boreal forest to climatic change." *Canadian Journal of Forest Research* 40 (7) (July): 1360-1370. doi:10.1139/X10-074.

Chapman, Herman H. 1932. "Is the longleaf type a climax?" *Ecology* 13 (4) (October): 328–334. doi:10.2307/1932309.

Charles, Adam J., Daniel J. Condon, Ian C. Harding, Heiko Pälike, John E. A. Marshall, Ying Cui, Lee Kump, and Ian W. Croudace. 2011. "Constraints on the numerical age of the Paleocene-Eocene boundary." *Geochemistry Geophysics Geosystems* 12 (6) (June 1): Q0AA17 (19 p.). doi:10.1029/2010GC003426.

Chekroun, Mickaël David, Dmitri Kondrashov, and Michael Ghil. 2011. "Predicting stochastic systems by noise sampling, and application to the El Niño-Southern Oscillation." *Proceedings of the National Academy of Sciences* 108 (29) (July 19): 11766-11771. doi:10.1073/pnas.1015753108.

Christensen, Norman L. 1981. Fire regimes in southeastern ecosystems. In *Fire Regimes and Ecosystem Properties Proceedings of the Conference*, 112-136. General technical report WO-26. Washington, D.C.: U.S. Department of Agriculture, Forest Service, June.

<http://www.npwrc.usgs.gov/resource/literatr/firewild/bib/040.htm>

—. 1989. "Landscape history and ecological change." *Journal of Forest History* 33 (3) (July): 116-125. doi:10.2307/4005121.

Christensen, Norman L., Ann M. Bartuska, James H. Brown, Stephen Carpenter, Carla D'Antonio, Robert Francis, Jerry F. Franklin, et al. 1996. "The report of the ecological society of America committee on the scientific basis for ecosystem management." *Ecological Applications* 6 (3) (August): 665-691. doi:10.2307/2269460.

Christian, Hugh J., Richard J. Blakeslee, Dennis J. Boccippio, William L. Boeck, Dennis E. Buechler, Kevin T. Driscoll, Steven J. Goodman, et al. 2003. "Global frequency and distribution of lightning as observed from space by the Optical Transient Detector." *Journal of Geophysical Research* 108 (D1) (January): 4005 (15 p.). doi:10.1029/2002JD002347.

Cissel, John H., Frederick J. Swanson, and Peter J. Weisberg. 1999. "Landscape management using historical fire regimes: Blue River, Oregon." *Ecological Applications* 9 (4) (November): 1217–1231. doi:10.1890/1051-0761(1999)009[1217:LMUHFR]2.0.CO;2.

Clark, Duncan. 2010. Royal Society's climate change guide cuts confusion out of the hard science: UK's "definitive voice of science" hopes guide will counter misunderstanding and bogus claims about man-made global warming. *Guardian News and Media. guardian.co.uk*. September 30. <http://www.guardian.co.uk/environment/2010/sep/30/royal-society-climate-change-guide>

Clark, James S., David M. Bell, Michelle H. Hersh, and Lauren Nichols. 2011. "Climate change vulnerability of forest biodiversity: Climate and competition tracking of demographic rates." *Global Change Biology* 17 (5) (May): 1834-1849. doi:10.1111/j.1365-2486.2010.02380.x.

Clark, James S., P. Daniel Royall, and Craig Chumbley. 1996. "The role of fire during climate change in an eastern deciduous forest at Devil's Bathtub, New York." *Ecology* 77 (7) (October): 2148–2166. doi:10.2307/2265709.

- Clark, James S. 1988. "Effect of climate change on fire regimes in northwestern Minnesota." *Nature* 334 (6179) (July 21): 233-235. doi:10.1038/334233a0.
- . 1989. "Effects of long-term water balances on fire regime, north-western Minnesota." *Journal of Ecology* 77 (4) (December): 989-1004.
- . 1990. "Fire and climate change during the last 750 yr in northwestern Minnesota." *Ecological Monographs* 60 (2) (June): 135-159. doi:10.2307/1943042.
- . 1996. "Testing disturbance theory with long-term data: Alternative life-history solutions to the distribution of events." *The American Naturalist* 148 (6) (December): 976-996.
- Clark, James S., and P. Daniel Royall. 1995. "Particle-size evidence for source areas of charcoal accumulation in late Holocene sediments of eastern North American lakes." *Quaternary Research* 43 (1) (January): 80-89. doi:10.1006/qres.1995.1008.
- Clark, James S., and P. Daniel Royall. 1996. "Local and regional sediment charcoal evidence for fire regimes in presettlement north-eastern North America." *Journal of Ecology* 84 (3) (June): 365-382.
- Clark, James S., Eric C. Grimm, Joe J. Donovan, Sherilyn C. Fritz, Daniel R. Engstrom, and James E. Almendinger. 2002. "Drought cycles and landscape responses to past aridity on Prairies of the Northern Great Plains, USA." *Ecology* 83 (3) (March): 595-601. doi:10.1890/0012-9658(2002)083[0595:DCALRT]2.0.CO;2.
- Cleland, David T., Peter E. Avers, W. Henry McNab, Mark E. Jensen, Robert G. Bailey, Thomas King, and Walter E. Russell. 1997. National hierarchical framework of ecological units. In *Ecosystem Management: Applications for Sustainable Forest and Wildlife Resources*, 181-200. illustrated. New Haven, CT: Yale University Press. <http://www.ncrs.fs.fed.us/gla/reports/hierarchy.htm>
- Climate Central, and Sally Ride Science. 2010. *What you need to know: Twenty questions and answers about climate change*. 1st ed. San Diego, CA: Sally Ride Science. <http://www.sallyridestore.com/what-you-need-to-know-twenty-questions-and-answers-about-climate-change-p-108.html>
- Clow, David W. 2010. "Changes in the timing of snowmelt and streamflow in Colorado: A response to recent warming." *Journal of Climate* 23 (9) (May): 2293-2306. doi:10.1175/2009JCLI2951.1.
- Cocke, Allison E., Peter Z. Fulé, and Joseph E. Crouse. 2005. "Comparison of burn severity assessments using Differenced Normalized Burn Ratio and ground data." *International Journal of Wildland Fire* 14 (2) (May): 189-198. doi:10.1071/WF04010.
- Cole, Kenneth L., and Robert S. Taylor. 1995. "Past and current trends of change in a dune prairie/oak savanna reconstructed through a multiple-scale history." *Journal of Vegetation Science* 6 (3) (June): 399-410. doi:10.2307/3236239.
- Collins, B.M., P.N. Omi, and P.L. Chapman. 2006. "Regional relationships between climate and wildfire-burned area in the Interior West, USA." *Can. J. For. Res* 36.
- Collins, Mat, Soon-II An, Wenju Cai, Alexandre Ganachaud, Eric Guilyardi, Fei-Fei Jin, Markus Jochum, et al. 2010. "The impact of global warming on the tropical Pacific Ocean and El Nino." *Nature Geoscience* 3 (6) (June): 391-397. doi:10.1038/ngeo868.

Collins, Scott L. 1992. "Fire frequency and community heterogeneity in tallgrass prairie vegetation." *Ecology* 73 (6) (December): 2001–2006. doi:10.2307/1941450.

Comer, Patrick, Don Faber-Langendoen, Rob Evans, Sue Gawler, Carmen Josse, Gwen Kittel, Shannon Menard, et al. 2003. *Ecological systems of the United States: A working classification of US terrestrial systems*. Arlington, Virginia: NatureServe, June. <http://www.natureserve.org/publications/usEcologicalsystems.jsp>

Compo, Gilbert P., Jeffrey S. Whitaker, Prashant D. Sardeshmukh, Nobuki Matsui, Robert J. Allan, Xungang Yin, Byron E. Gleason, et al. 2011. "The twentieth century reanalysis project." *Quarterly Journal of the Royal Meteorological Society* 137 (654) (January): 1-28. doi:10.1002/qj.776.

Conard, Susan G., and David R. Weise. 1998. Management of fire regime, fuels, and fire effects in southern California chaparral: Lessons from the past and thoughts for the future. In *Proceedings Fire In Ecosystem Management: Shifting the Paradigm from Suppression to Prescription*, 342-350. Tallahassee, Florida: Tall Timbers Research, Inc. <http://ddr.nal.usda.gov/handle/10113/34404>

Cook, Edward R., Connie A. Woodhouse, C. Mark Eakin, David M. Meko, and David W. Stahle. 2004. "Long-term aridity changes in the Western United States." *Science* 306 (5698) (November 5): 1015-1018. doi:10.1126/science.1102586.

Cook, Edward R., David M. Meko, David W. Stahle, and Malcolm K. Cleaveland. 1999. "Drought reconstructions for the continental United States." *Journal of Climate* 12 (4) (April): 1145–1162. doi:10.1175/1520-0442(1999)012<1145:DRFTCU>2.0.CO;2.

Cook, Edward R., Kevin J. Anchukaitis, Brendan M. Buckley, Rosanne D. D'Arrigo, Gordon C. Jacoby, and William E. Wright. 2010. "Asian monsoon failure and megadrought during the last millennium." *Science* 328 (5977) (April 23): 486-489. doi:10.1126/science.1185188.

Cooke, William, Valentine Anantharaj, Charles Wax, Jinmu Choi, Katarzyna Grala, Matthew Jolly, Grady P. Dixon, Jamie Dyer, David L. Evans, and Gregory B. Goodrich. 2007. Integrating climatic and fuels information into national fire risk decision support tools. In *The Fire Environment--Innovations, Management, and Policy: Conference Proceedings*, 555-569. USDA Forest Service Proceedings RMRS-P-46CD. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. <http://www.treesearch.fs.fed.us/pubs/28600>

Cooper, Charles F. 1960. "Changes in vegetation, structure, and growth of southwestern pine forests since white settlement." *Ecological Monographs* 30 (2) (April): 129–164. doi:10.2307/1948549.

—. 1961. "The ecology of fire." *Scientific American* 204 (4) (April): 150-160.

Corringham, Thomas W., Anthony L. Westerling, and Barbara J. Morehouse. 2006. Exploring use of climate information in wildland fire management: A decision calendar study. In *Monitoring Science and Technology Symposium: Unifying Knowledge for Sustainability in the Western Hemisphere*, 603-613. Proceedings RMRS-P-42CD. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. <http://www.treesearch.fs.fed.us/pubs/26546>

Court, Arnold. 1957. "Climatology: Complex, dynamic, and synoptic." *Annals of the Association of American Geographers* 47 (2) (June): 125–136. doi:10.1111/j.1467-8306.1957.tb01528.x.

Covington, W. Wallace, and Margaret M. Moore. 1994. "Postsettlement changes in natural fire regimes and forest structure: Ecological restoration of old-growth ponderosa pine forests." *Journal of Sustainable Forestry* 2 (1-2) (October): 153–181. <http://library.eri.nau.edu/cgi-bin/library.cgi?e=q-01000-00---off-0erilibra--00-1---0-10-0---0---0direct-10-DC-4-----0-1l--11-en-50---20-about-M.+M.+Moore--00-3-21-00-0-0-11-0-0utfZz-8-00&a=d&c=erilibra&srp=0&srn=0&cl=search&d=HASHdd92e6da703e4d7ec64887>
doi:10.1300/J091v02n01_07.

Cowell, C. Mark. 1998. "Historical change in vegetation and disturbance on the Georgia Piedmont." *The American Midland Naturalist* 140 (1): 78–89. doi:10.1674/0003-0031(1998)140[0078:HCIVAD]2.0.CO;2.

Crickmay, Colin Hayter. 1935. "The nature and origin of fusain." *American Midland Naturalist* 16 (1) (January): 94–98.

Crimmins, Michael A. 2006. "Synoptic climatology of extreme fire-weather conditions across the southwest United States." *International Journal of Climatology* 26 (8) (June 30): 1001–1016. doi:10.1002/joc.1300.

Crimmins, Michael A., and Andrew C. Comrie. 2004. "Interactions between antecedent climate and wildfire variability across south-eastern Arizona." *International Journal of Wildland Fire* 13 (4) (December): 455–466. doi:10.1071/WF03064.

Crimmins, Shawn M., Solomon Z. Dobrowski, Jonathan A. Greenberg, John T. Abatzoglou, and Alison R. Mynsberge. 2011. "Changes in climatic water balance drive downhill shifts in plant species' optimum elevations." *Science* 331 (6015) (January 21): 324–327. doi:10.1126/science.1199040.

Crimmons, Michael A., George Zaires, Niina Haas, Christopher K. Jones, Gregg Garfin, and Theresa M. Crimmins. 2007. "Changes on the range: Exploring climate change with range managers." *Journal of Natural Resources and Life Sciences Education* 36: 76–86.

Cronin, Thomas M. 2009. *Paleoclimates: Understanding climate change past and present*. illustrated. New York, NY: Columbia University Press, November. <http://cup.columbia.edu/book/978-0-231-14494-0/paleoclimates>

Crookston, Nicholas L., Rehfeldt, Gerald E., Dixon, Gary E., and Weiskittel, Aaron R. 2010. "Addressing climate change in the forest vegetation simulator to assess impacts on landscape forest dynamics." *Forest Ecology and Management* 260 (7) (August 31): 1198–1211.
<http://www.treesearch.fs.fed.us/pubs/35984> doi:10.1016/j.foreco.2010.07.013.

Crowley, John M. 1967. "Biogeography." *The Canadian Geographer/Le Géographe Canadien* 11 (4) (December): 312–326. doi:10.1111/j.1541-0064.1967.tb00474.x.

Crutzen, Paul J., and Johann Georg Goldammer, eds. 1993. *Fire in the environment: The ecological, atmospheric and climatic importance of vegetation fires: Report of the Dahlem Workshop, Berlin, 15-20 March, 1992*. Vol. 1992. Dahlem workshop reports, Environmental sciences research report ES 13. Chichester, England; New York, NY: John Wiley & Sons Inc., July.
http://books.google.com/books/about/Fire_in_the_environment.html?id=ZoPwAAAAMAAJ

Cui, Ying, Lee R. Kump, Andy J. Ridgwell, Adam J. Charles, Christopher K. Junium, Aaron F. Diefendorf, Katherine H. Freeman, Nathan M. Urban, and Ian C. Harding. 2011. "Slow release of fossil carbon during

- the Palaeocene–Eocene Thermal Maximum.” *Nature Geoscience* 4 (7) (July): 481–485. doi:10.1038/ngeo1179.
- Cutter, Bruce E., and Richard P. Guyette. 1994. “Fire frequency on an oak-hickory ridgeline in the Missouri Ozarks.” *American Midland Naturalist* 132 (2) (October): 393–398.
- Cwynar, Les C. 1987. “Fire and the forest history of the North Cascade Range.” *Ecology* 68 (4) (August): 791–802. doi:10.2307/1938350.
- D’Antonio, Carla M., and Peter M. Vitousek. 1992. “Biological invasions by exotic grasses, the grass/fire cycle, and global change.” *Annual Review of Ecology and Systematics* 23 (November): 63–87. doi:10.1146/annurev.es.23.110192.000431.
- Dague, Charles I. 1930. “Disastrous fire weather of September 1929.” *Monthly Weather Review* 58 (9) (September): 368–370. doi:10.1175/1520-0493(1930)58<368:DFWOS>2.0.CO;2.
- Dai, Aiguo. 2011. “Drought under global warming: A review.” *Wiley Interdisciplinary Reviews: Climate Change* 2 (1) (February): 45–65. doi:10.1002/wcc.81.
- Dai, Aiguo, Kevin E. Trenberth, and Thomas R. Karl. 1998. “Global variations in droughts and wet spells: 1900–1995.” *Geophysical Research Letters* 25 (17) (September): 3367–3370. doi:10.1029/98GL52511.
- Dale, Virginia H. 1997. “The relationship between land-use change and climate change.” *Ecological Applications* 7 (3) (August): 753–769. doi:10.1890/1051-0761(1997)007[0753:TRBLUC]2.0.CO;2.
- Dale, Virginia H., Linda A. Joyce, Steve McNULTY, Ronald P. Neilson, Matthew P. Ayres, Michael D. Flannigan, Paul J. Hanson, et al. 2001. “Climate change and forest disturbances.” *BioScience* 51 (9) (September): 723–734. doi:10.1641/0006-3568(2001)051[0723:CCAFD]2.0.CO;2.
- Daly, Christopher, Ronald P. Neilson, and Donald L. Phillips. 1994. “A statistical-topographic model for mapping climatological precipitation over mountainous terrain.” *Journal of Applied Meteorology* 33 (2) (February): 140–158. doi:10.1175/1520-0450(1994)033<0140:ASTMFM>2.0.CO;2.
- Daniels, Mark L., R. Scott Anderson, and Cathy Whitlock. 2005. “Vegetation and fire history since the Late Pleistocene from the Trinity Mountains, northwestern California, USA.” *The Holocene* 15 (7) (November): 1062–1071. doi:10.1191/0959683605hl878ra.
- Davis, Anthony M. 1977. “The prairie-deciduous forest ecotone in the upper Middle West.” *Annals of the Association of American Geographers* 67 (2) (June): 204–213. doi:10.1111/j.1467-8306.1977.tb01133.x.
- Davis, Owen K. 1999. “Pollen analysis of Tulare Lake, California: Great Basin-like vegetation in Central California during the full-glacial and early Holocene.” *Review of Palaeobotany and Palynology* 107 (3–4) (November): 249–257. doi:10.1016/S0034-6667(99)00020-2.
- Davis, Owen K., R. Scott Anderson, Patricia L. Fall, Mary K. O’Rourke, and Robert S. Thompson. 1985. “Palynological evidence for early Holocene aridity in the southern Sierra Nevada, California.” *Quaternary Research* 24 (3) (November): 322–332. doi:10.1016/0033-5894(85)90054-7.
- Day, Gordon M. 1953. “The Indian as an ecological factor in the northeastern forest.” *Ecology* 34 (2) (April): 329–346. doi:10.2307/1930900.

- Delcourt, Hazel R., Paul A. Delcourt, and Thompson Webb III. 1982. "Dynamic plant ecology: The spectrum of vegetational change in space and time." *Quaternary Science Reviews* 1 (3): 153-175. doi:10.1016/0277-3791(82)90008-7.
- Delcourt, Hazel R., and Paul A. Delcourt. 1988. "Quaternary landscape ecology: Relevant scales in space and time." *Landscape Ecology* 2 (1) (November): 23–44. doi:10.1007/BF00138906.
- . 1997. "Pre-Columbian Native American use of fire on southern Appalachian landscapes." *Conservation Biology* 11 (4) (August): 1010–1014. doi:10.1046/j.1523-1739.1997.96338.x.
- Delcourt, Paul A., and Hazel R. Delcourt. 1987. *Long-term forest dynamics of the temperate zone: A case study of late-Quaternary forests in eastern North America*. 1st ed. Vol. 63. Ecological Studies. New York; Berlin: Springer-Verlag, August. <http://www.amazon.com/Long-Term-Forest-Dynamics-Temperate-Zone/dp/0387964959>
- . 2004. *Prehistoric Native Americans and ecological change: Human ecosystems in eastern North America since the Pleistocene*. illustrated, 1st edition. Cambridge, United Kingdom: Cambridge University Press, July. http://www.cambridge.org/gb/knowledge/isbn/item5708443/?site_locale=en_GB
- Delcourt, Paul A., and Hazel R. Delcourt. 1998. "The influence of prehistoric human-set fires on oak-chestnut forests in the southern Appalachians." *Castanea* 63 (3) (September): 337–345.
- Delcourt, Paul A., Hazel R. Delcourt, Cecil R. Ison, William E. Sharp, and Kristen J. Gremillion. 1998. "Prehistoric human use of fire, the eastern agricultural complex, and Appalachian oak-chestnut forests: Paleoecology of Cliff Palace Pond, Kentucky." *American Antiquity* 63 (2) (April): 263–278.
- Della-Marta, Paul M., Malcolm R. Haylock, Jürg Luterbacher, and Heinz Wanner. 2007. "Doubled length of western European summer heat waves since 1880." *Journal of Geophysical Research* 112 (15) (August): D15103 (11 p.). doi:10.1029/2007JD008510.
- Della-Marta, Paul M., Jürg Luterbacher, Hans von Weissenfluh, Elena Xoplaki, Manola Brunet, and Heinz Wanner. 2007. "Summer heat waves over western Europe 1880–2003, their relationship to large-scale forcings and predictability." *Climate Dynamics* 29 (2-3) (August): 251-275. doi:10.1007/s00382-007-0233-1.
- Denevan, William M., ed. 1992. *The Native population of the Americas in 1492*. 2nd ed. Madison, WI: University of Wisconsin Press, March. <http://uwpress.wisc.edu/books/0289.htm>
- Dennison, Philip E., Max A. Moritz, and Robert S. Taylor. 2008. "Evaluating predictive models of critical live fuel moisture in the Santa Monica Mountains, California." *International Journal of Wildland Fire* 17 (1) (February): 18–27. doi:10.1071/WF07017.
- Dessler, Andrew E. 2010. "A determination of the cloud feedback from climate variations over the past decade." *Science* 330 (6010) (December 10): 1523-1527. doi:10.1126/science.1192546.
- . 2011. "Cloud variations and the Earth's energy budget." *Geophysical Research Letters* Paper in Press (?): 14 p. doi:10.1029/2011GL049236.
- DeVivo, Michael S. 1991. Indian use of fire and land clearance in the southern Appalachians. In *Fire and the Environment: Ecological and Cultural Perspectives. Proceedings of an International Symposium*, 306–

310. Asheville, NC: U.S. Dept. of Agriculture, Forest Service, Southeastern Forest Experiment Station, Gen. Tech. Rep. SE-69, August. http://www.srs.fs.usda.gov/pubs/gtr/gtr_se069/gtr_se069.htm

Dickmann, Donald I., and David T. Cleland. 2002. *Fire return intervals and fire cycles for historic fire regimes in the Great Lakes Region: A synthesis of the literature (Draft)*. Great Lakes Ecological Assessment. St. Paul, MN: US Forest Service, North Central Research Station, August. <http://www.ncrs.fs.fed.us/gla/reports.htm>. <http://frames.nacse.org/0/590.html>

Dieterich, John H., and Thomas W. Swetnam. 1984. "Dendrochronology of a fire-scarred ponderosa pine." *Forest Science* 30 (1) (March 1): 238–247.

Diffenbaugh, Noah S., and Moetasim Ashfaq. 2010. "Intensification of hot extremes in the United States." *Geophysical Research Letters* 37 (15) (August): L15701 (5 p.). doi:10.1029/2010GL043888.

Diffenbaugh, Noah S., and Martin Scherer. 2011. "Observational and model evidence of global emergence of permanent, unprecedented heat in the 20th and 21st centuries." *Climatic Change* 107 (3-4) (August): 615-624. doi:10.1007/s10584-011-0112-y.

Diffenbaugh, Noah S., Moetasim Ashfaq, Bryan Shuman, John W. Williams, and Patrick J. Bartlein. 2006. "Summer aridity in the United States: Response to mid-Holocene changes in insolation and sea surface temperature." *Geophysical Research Letters* 33 (22) (November): L22712 (5 p.). doi:10.1029/2006GL028012.

Doak, Daniel F., and William F. Morris. 2010. "Demographic compensation and tipping points in climate-induced range shifts." *Nature* 467 (7318) (October 21): 959-962. doi:10.1038/nature09439.

Dodson, John, ed. 2010. *Changing climates, Earth systems and society*. 1st ed. International Year of Planet Earth. Dordrecht, Heidelberg, London, New York: Springer. <http://www.springer.com/environment/global+change+-+climate+change/book/978-90-481-8715-7>

Doe III, William W., Robert B. Shaw, Robert G. Bailey, David S. Jones, and Thomas E. Macia. 1999. "Locations and environments of US army training and testing lands: An ecoregional framework for assessment." *Federal Facilities Environmental Journal* 10 (3): 9–26. doi:10.1002/ffej.3330100303.

Donnegan, Joseph A., Thomas T. Veblen, and Jason S. Sibold. 2001. "Climatic and human influences on fire history in Pike National Forest, central Colorado." *Canadian Journal of Forest Research* 31 (9) (September): 1526–1539. doi:10.1139/x01-093.

Dorney, Cheryl H., and John R. Dorney. 1989. "An unusual oak savanna in northeastern Wisconsin: The effect of Indian-caused fire." *American Midland Naturalist* 122 (1) (July): 103-113. doi:10.2307/2425687.

Drobyshev, Igor, Mike D. Flannigan, Yves Bergeron, Martin P. Girardin, and Byambagere Suran. 2010. "Variation in local weather explains differences in fire regimes within a Québec south-eastern boreal forest landscape." *International Journal of Wildland Fire* 19 (8) (December): 1073–1082. doi:10.1071/WF09101.

Drummond, Mark A., and Thomas R. Loveland. 2010. "Land-use pressure and a transition to forest-cover loss in the eastern United States." *BioScience* 60 (4) (April): 286-298. doi:10.1525/bio.2010.60.4.7.

Dubayah, Ralph, and M. Paul Rich. 1995. "Topographic solar radiation models for GIS." *International Journal of Geographical Information Science* 9 (4) (July): 405-419. doi:10.1080/02693799508902046.

Duffy, Paul A., John E. Walsh, Jonathan M. Graham, Daniel H. Mann, and T. Scott Rupp. 2005. "Impacts of large-scale atmospheric-ocean variability on Alaskan fire season severity." *Ecological Applications* 15 (4) (August): 1317–1330. doi:10.1890/04-0739.

Dukes, Jeffrey, Nona Chiariello, Scott Loarie, and Christopher Field. 2011. "Strong Response of an Invasive Plant Species (*Centaurea solstitialis* L.) to Global Environmental Changes." *Ecological Applications* Preprints (May): 110527080348010. doi:10.1890/11-0111.1.

Dull, Robert A. 1999. "Palynological evidence for 19th century grazing-induced vegetation change in the southern Sierra Nevada, California, U.S.A." *Journal of Biogeography* 26 (4) (July): 899-912. doi:10.1046/j.1365-2699.1999.00330.x.

Easterling, David R., and Michael F. Wehner. 2009. "Is the climate warming or cooling?" *Geophysical Research Letters* 36 (8) (April): L08706 (3 P.). doi:10.1029/2009GL037810.

ECOFYS, and Climate Analytics. Climate Action Tracker. Independent science-based assessment (Green House Gas Emission). *No major changes in ambition: High chance to exceed 3°C.* <http://www.climateactiontracker.org/>

Edwards, Paul N. 2001. A brief history of atmospheric general circulation modeling (Chapter 2). In *General Circulation Model Development: Past, Present, and Future*, 70:67-90. International Geophysics. New York, NY: Academic Press. http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B8H3C-4P3V56J-5&_user=10&_coverDate=12%2F31%2F2001&_rdoc=5&_fmt=high&_orig=browse&_origin=browse&_zne=rslt_list_item&_srch=doc-info%28%23toc%2342575%232001%23999299999%23657320%23FLP%23display%23Volume%29&_cdi=42575&_sort=d&_docanchor=&_ct=27&_acct=C000050221&_version=1&_urlVersion=0&_userid=10&_md5=1ee5bc8f201396b6575debc012821342&searchtype=a

———. 2011. "History of climate modeling." *Wiley Interdisciplinary Reviews: Climate Change* 2 (1) (February): 128-139. doi:10.1002/wcc.95.

Egan, Timothy. 2009. *The Big Burn: Teddy Roosevelt and the fire that saved America*. 1st ed. New York, NY: Houghton Mifflin Harcourt, October. <http://search.barnesandnoble.com/The-Big-Burn/Timothy-Egan/e/9780618968411>

Eidenshink, Jeff, Brian Schwind, Ken Brewer, Zhi-Liang Zhu, Brad Quayle, and Stephen Howard. 2007. "A project for monitoring trends in burn severity." *Fire Ecology* 3 (1) (November): 3-21. doi:10.4996/fireecology.0301003.

Emanuel, William R., Herman H. Shugart, and Mary P. Stevenson. 1985. "Climatic change and the broad-scale distribution of terrestrial ecosystem complexes." *Climatic Change* 7 (1) (March): 29–43. doi:10.1007/BF00139439.

Enache, Mihaela D., and Brian F. Cumming. 2009. "Extreme fires under warmer and drier conditions inferred from sedimentary charcoal morphotypes from Opatcho Lake, central British Columbia, Canada." *The Holocene* 19 (6) (September): 835-846. doi:10.1177/0959683609337357.

Euskirchen, Eugenie S., A. David McGuire, F. Stuart Chapin III, and T. Scott Rupp. 2010. "The changing effects of Alaska's boreal forests on the climate system." *Canadian Journal of Forest Research* 40 (7) (July): 1336-1346. doi:10.1139/X09-209.

Everett, Richard L., Richard Schellhaas, Dave Keenum, Don Spurbeck, and Pete Ohlson. 2000. "Fire history in the ponderosa pine/Douglas-fir forests on the east slope of the Washington Cascades." *Forest Ecology and Management* 129 (1-3) (April 17): 207–225. doi:10.1016/S0378-1127(99)00168-1.

Fahey, Timothy J., and William A. Reiners. 1981. "Fire in the forests of Maine and New Hampshire." *Bulletin of the Torrey Botanical Club* 108 (3) (September): 362–373. doi:10.2307/2484716.

Falk, Donald A., Emily K. Heyerdahl, Peter M. Brown, Calvin Farris, Peter Z. Fulé, Donald McKenzie, Thomas W. Swetnam, Alan H. Taylor, and Megan L. Van Horne. 2011. "Multi-scale controls of historical forest-fire regimes: new insights from fire-scar networks (Reviews)." *Frontiers in Ecology and the Environment* e-view (June): 13 p. doi:10.1890/100052.

Falk, Donald A., Carol Miller, Donald McKenzie, and Anne E. Black. 2007. "Cross-scale analysis of fire regimes." *Ecosystems* 10 (5) (August): 809–823. doi:10.1007/s10021-007-9070-7.

Fall, Patricia L. 1997. "Fire history and composition of the subalpine forest of western Colorado during the Holocene." *Journal of Biogeography* 24 (3) (May): 309–325. doi:10.1046/j.1365-2699.1997.00094.x.

Faust, Franz X., Cristóbal Gnecco, Hermann Mannstein, and Jörg Stamm. 2006. "Evidence for the postconquest demographic collapse of the Americas in historical CO₂ levels." *Earth Interactions* 10 (11) (May): 1–14. doi:10.1175/EI157.1.

Fawcett, Peter J., Josef P. Werne, R. Scott Anderson, Jeffrey M. Heikoop, Erik T. Brown, Melissa A. Berke, Susan J. Smith, et al. 2011. "Extended megadroughts in the southwestern United States during Pleistocene interglacials." *Nature* 470 (7335) (February 24): 518–521. doi:10.1038/nature09839.

Fedorov, Alexey V., Christopher M. Brierley, and Kerry Emanuel. 2010. "Tropical cyclones and permanent El Niño in the early Pliocene epoch." *Nature* 463 (7284) (February 25): 1066–1070. doi:10.1038/nature08831.

Fei, Songlin, and Kim C. Steiner. 2007. "Evidence for increasing red maple abundance in the eastern United States." *Forest Science* 53 (4) (August): 473–477.

Findell, Kirsten L., Pierre Gentine, Benjamin R. Lintner, and Christopher Kerr. 2011. "Probability of afternoon precipitation in eastern United States and Mexico enhanced by high evaporation." *Nature Geoscience* 4 (7) (July): 434–439. doi:10.1038/ngeo1174.

Finney, Mark A. 2001. "Design of regular landscape fuel treatment patterns for modifying fire growth and behavior." *Forest Science* 47 (2) (May): 219–228.

Fischer, Erich M., and Christoph Schär. 2009. "Future changes in daily summer temperature variability: Driving processes and role for temperature extremes." *Climate Dynamics* 33 (7-8) (December): 917–935. doi:10.1007/s00382-008-0473-8.

Fisher, R. F., Michael J. Jenkins, and William F. Fisher. 1987. "Fire and the prairie-forest mosaic of Devils Tower National Monument." *American Midland Naturalist* 117 (2) (April): 250–257. doi:10.2307/2425966.

Flannigan, Michael D., Brian D. Amiro, Kimberley A. Logan, Brian J. Stocks, and B. Mike Wotton. 2006. "Forest fires and climate change in the 21st century." *Mitigation and Adaptation Strategies for Global Change* 11 (4) (July): 847–859. doi:10.1007/s11027-005-9020-7.

Flannigan, Michael D., Brian J. Stocks, and B. Mike Wotton. 2000. "Climate change and forest fires." *The Science of the Total Environment* 262 (3) (November 15): 221-229. doi:10.1016/S0048-9697(00)00524-6.

Flannigan, Mike D, Meg A Krawchuk, William J de Groot, B. Mike Wotton, and Lynn M Gowman. 2009. "Implications of changing climate for global wildland fire." *International Journal of Wildland Fire* 18 (5) (August): 483-507. doi:10.1071/WF08187.

Flannigan, Mike D., Kimberley A. Logan, Brian D. Amiro, Walter R. Skinner, and Brian J. Stocks. 2005. "Future area burned in Canada." *Climatic Change* 72 (1-2) (September): 1–16. doi:10.1007/s10584-005-5935-y.

Flannigan, Mike, Brian Stocks, Merritt Turetsky, and Mike Wotton. 2009. "Impacts of climate change on fire activity and fire management in the circumboreal forest." *Global Change Biology* 15 (3) (March): 549-560. doi:10.1111/j.1365-2486.2008.01660.x.

Flatley, William T., Charles W. Lafon, and Henri D. Grissino-Mayer. 2011. "Climatic and topographic controls on patterns of fire in the southern and central Appalachian Mountains, USA." *Landscape Ecology* 26 (2) (February): 195-209. doi:10.1007/s10980-010-9553-3.

Fleming, James R. 1999. "Joseph Fourier, the greenhouse effect', and the quest for a universal theory of terrestrial temperatures." *Endeavour* 23 (2): 72–75. doi:10.1016/S0160-9327(99)01210-7.

Flesch, Nathan. 2009. The Peshtigo fire, October 8, 1871: Calamity and response. History B.A. Theses, Madison, WI: University of Wisconsin, July 14. <http://digital.library.wisc.edu/1793/35448>

Floyd, M. Lisa, William H. Romme, and David D. Hanna. 2000. "Fire history and vegetation pattern in Mesa Verde national Park, Colorado, USA." *Ecological Applications* 10 (6) (December): 1666–1680. doi:10.1890/1051-0761(2000)010[1666:FHAVPI]2.0.CO;2.

Fobes, Charles B. 1948. "Historic forest fires in Maine." *Economic Geography* 24 (4) (October): 269-273.

Foley, Jonathan A., John E. Kutzbach, Michael T. Coe, and Samuel Levis. 1994. "Feedbacks between climate and boreal forests during the Holocene epoch." *Nature* 371 (6492) (September 1): 52–54. doi:10.1038/371052a0.

Folland, Chris K., Thomas R. Karl, and M. Jim Salinger. 2002. "Observed climate variability and change." *Weather* 57 (8) (August): 269-278. doi:10.1256/004316502320517353.

Ford, Chelcy R., Stephanie H. Lasket, Wayne T. Swank, and James M. Vose. 2011. "Can forest management be used to sustain water-based ecosystem services in the face of climate change?" *Ecological Applications* 21 (September): 2049-2067. doi:10.1890/10-2246.1.

Forest History Society. 1910 fres - USFS history. *U.S. Forest Service History*.

<http://www.foresthistoryst.org/ASPNET/Policy/Fire/FamousFires/1910Fires.aspx>

Forman, Richard T. T., and Ralph E. Boerner. 1981. "Fire frequency and the Pine Barrens of New Jersey." *Bulletin of the Torrey Botanical Club* 108 (1) (March): 34-50. doi:10.2307/2484334.

Forman, Richard T. T., ed. 1998. *Pine Barrens: Ecosystem and landscape*. illustrated, reprint, revised. Environmental Studies and Ecology. New Brunswick, NJ, and London: Rutgers University Press, October. http://rutgerspress.rutgers.edu/acatalog/_Pine_Barrens_329.html

Foti, Tom, and George Bukenhofer. 1999. Ecological units of the Highlands (Chapter 1). In *Ozark-Ouachita Highlands Assessment: Terrestrial Vegetation and Wildlife*, 5:1-6. General Technical Report SRS GTR-SRS-035. Asheville, N.S.: U.S. Dept. of Agriculture, Forest Service, Southern Research Station, December.
<http://www.srs.fs.usda.gov/pubs/2039>

Fowler, Cynthia, and Evelyn Konopik. 2007. "The history of fire in the southern United States." *Human Ecology Review* 14 (2): 165–176.

Fox, Nigel, Andrea Kaiser-Weiss, Werner Schmutz, Kurtis Thome, Dave Young, Bruce Wielicki, Rainer Winkler, and Emma Woolliams. 2011. "Accurate radiometry from space: An essential tool for climate studies." *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 369 (1953) (October 28): 4028-4063. doi:10.1098/rsta.2011.0246.

Fraedrich, Klaus, Friedrich-Wilhelm Gerstengarbe, and Peter C. Werner. 2001. "Climate shifts during the last century." *Climatic Change* 50 (4) (September): 405–417. doi:10.1023/A:1010699428863.

Franklin, J. F., and K. N. Johnson. 2011. "Societal challenges in understanding and responding to regime shifts in forest landscapes." *Proceedings of the National Academy of Sciences* (October 3). doi:10.1073/pnas.1114045108. <http://www.pnas.org/cgi/doi/10.1073/pnas.1114045108>

Frechette, Jedediah D., and Grant A. Meyer. 2009. "Holocene fire-related alluvial-fan deposition and climate in ponderosa pine and mixed-conifer forests, Sacramento Mountains, New Mexico, USA." *The Holocene* 19 (4) (June): 639-651. doi:10.1177/0959683609104031.

Frederiksen, Carsten Segerlund, Jorgen Segerlund Frederiksen, Janice Maria Sisson, and Stacey Lee Osbrough. 2011. "Changes and projections in Australian winter rainfall and circulation: Anthropogenic forcing and internal variability." *International Journal of Climate Change: Impacts and Responses* 2 (3): 143-162.

French, Nancy H. F., Pierre Goovaerts, and Eric S. Kasischke. 2004. "Uncertainty in estimating carbon emissions from boreal forest fires." *Journal of Geophysical Research* 109 (14) (May): D14S08 (12 p.). doi:10.1029/2003JD003635.

Friedlingstein, Pierre, Peter Cox, Richard Betts, Laurent Bopp, Werner von Bloh, Victor Brovkin, Patricia Cadule, et al. 2006. "Climate–carbon cycle feedback analysis: Results from the C4MIP model intercomparison." *Journal of Climate* 19 (14) (July): 3337–3353. doi:10.1175/JCLI3800.1.

Fromm, Michael, Daniel T. Lindsey, René Servranckx, Glenn Yue, Thomas Trickl, Robert Sica, Paul Doucet, and Sophie Godin-Beekmann. 2010. "The untold story of pyrocumulonimbus." *Bulletin of the American Meteorological Society* 91 (9) (September): 1193-1209. doi:10.1175/2010BAMS3004.1.

Frost, Cecil C. III. 2000. Presettlement fire frequency regimes of the United States: A first approximation (Chapter 4) (In Studies in landscape fire ecology and presettlement vegetation of the southeastern United States). Ph.D. Dissertation Chapter, Chapel Hill, N.C.: University of North Carolina.
http://www.bio.unc.edu/faculty/peet/lab/theses/Frost_PhD_2000.pdf

Frumhoff, Peter C., James J. McCarthy, Jerry M. Melillo, Susanne C. Moser, and Donald J. Wuebbles. 2007. *Confronting climate change in the US Northeast: Science, impacts, and solutions*. Synthesis report of the Northeast Climate Impacts Assessment (NECIA). Cambridge, MA: Union of Concerned Scientists, July.
<http://www.northeastclimateimpacts.org>

- Fry, Danny L., and Scott L. Stephens. 2006. "Influence of humans and climate on the fire history of a ponderosa pine-mixed conifer forest in the southeastern Klamath Mountains, California." *Forest Ecology and Management* 223 (1-3) (March 1): 428–438. doi:10.1016/j.foreco.2005.12.021.
- Fulé, Peter Z. 2008. "Does it make sense to restore wildland fire in changing climate?" *Restoration Ecology* 16 (4) (December): 526-531. doi:10.1111/j.1526-100X.2008.00489.x.
- Fulé, Peter Z., José Villanueva-Díaz, and Mauro Ramos-Gómez. 2005. "Fire regime in a conservation reserve in Chihuahua, Mexico." *Canadian Journal of Forest Research* 35 (2) (February): 320–330. doi:10.1139/x04-173.
- Galeotti, Simone, Anna von der Heydt, Matthew Huber, David Bice, Henk Dijkstra, Tom Jilbert, Luca Lanci, and Gert-Jan Reichart. 2010. "Evidence for active El Niño Southern Oscillation variability in the Late Miocene greenhouse climate." *Geology* 38 (5) (May): 419-422. doi:10.1130/G30629.1.
- Gauthier, Sylvie, Yves Bergeron, and Jean-Pierre Simon. 1996. "Effects of fire regime on the serotiny level of jack pine." *Journal of Ecology* 84 (4) (August): 539-548.
- Gavin, Daniel G., Linda B. Brubaker, and Kenneth P. Lertzman. 2003. "Holocene fire history of a coastal temperate rain forest based on soil charcoal radiocarbon dates." *Ecology* 84 (1) (January): 186-201. doi:10.1890/0012-9658(2003)084[0186:HFHOAC]2.0.CO;2.
- Gavin, Daniel G., Douglas J. Hallett, Feng Sheng Hu, Kenneth P. Lertzman, Susan J. Prichard, Kendrick J. Brown, Jason A. Lynch, Patrick Bartlein, and David L. Peterson. 2007. "Forest fire and climate change in western North America: Insights from sediment charcoal records." *Frontiers in Ecology and the Environment* 5 (9) (November): 499-506. doi:10.1890/060161.
- Gavin, Daniel G., Feng Sheng Hu, Kenneth Lertzman, and Peter Corbett. 2006. "Weak climatic control of stand-scale fire history during the Late Holocene." *Ecology* 87 (7) (July): 1722-1732. doi:10.1890/0012-9658(2006)87[1722:WCCOSF]2.0.CO;2.
- Gedalof, Ze'ev. 2011. Climate and spatial patterns of wildfire in North America (Chapter 4). In *The Landscape Ecology of Fire*, 213:89–115. 1st ed. Ecological Studies. New York, NY: Springer Verlag. <http://www.springerlink.com/content/l522l0p176n57617/>
- Gedalof, Ze'ev, David L. Peterson, and Nathan J. Mantua. 2005. "Atmospheric, climatic, and ecological controls on extreme wildfire years in the northwestern United States." *Ecological Applications* 15 (1) (February): 154–174. doi:10.1890/03-5116.
- Gedzelman, Stanley David. 1994. "Chaos rules: Edward Lorenz capped a century of progress in forecasting by explaining unpredictability." *Weatherwise* 47 (4) (September): 21-26. doi:10.1080/00431672.1994.9925328.
- Geological Society of London. 2010. Geological Society of London - Climate change: Evidence from the geological record. *The Geological Society - Climate Change*. <http://www.geolsoc.org.uk/climatechange>
- Gerrienne, Philippe, Patricia G. Gensel, Christine Strullu-Derrien, Hubert Lardeux, Philippe Steemans, and Cyrille Prestianni. 2011. "A simple type of wood in two early Devonian plants." *Science* 333 (6044) (August 12): 837-837. doi:10.1126/science.1208882.

- Gibson, David J., and Lloyd C. Hulbert. 1987. "Effects of fire, topography and year-to-year climatic variation on species composition in tallgrass prairie." *Vegetatio* 72 (3) (November): 175-185.
- Giglio, Louis, Ivan Csiszar, and Christopher O. Justice. 2006. "Global distribution and seasonality of active fires as observed with the Terra and Aqua Moderate Resolution Imaging Spectroradiometer (MODIS) sensors." *Journal of Geophysical Research* 111 (G2) (June): G02016 (12 p.). doi:10.1029/2005JG000142.
- Gill, A. Malcolm. 1975. "Fire and the Australian flora: A review." *Australian Forestry* 38 (1) (June): 4-25.
- Gill, A. Malcolm, and Grant Allan. 2008. "Large fires, fire effects and the fire-regime concept." *International Journal of Wildland Fire* 17 (6) (December): 688-695. doi:10.1071/WF07145.
- Gill, A. Malcolm, and Michael A. McCarthy. 1998. "Intervals between prescribed fires in Australia: what intrinsic variation should apply?" *Biological Conservation* 85 (1-2) (August): 161-169. doi:10.1016/S0006-3207(97)00121-3.
- Gill, A. Malcolm, and Scott L. Stephens. 2009. "Scientific and social challenges for the management of fire-prone wildland-urban interfaces." *Environmental Research Letters* 4 (3) (September): 034014 (10 p.). doi:10.1088/1748-9326/4/3/034014.
- Gillett, Nathan P., Andrew J. Weaver, Francis W. Zwiers, and Michael D. Flannigan. 2004. "Detecting the effect of climate change on Canadian forest fires." *Geophysical Research Letters* 31 (18) (September): L18211 (4 p.). doi:10.1029/2004GL020876.
- Gillett, Nathan P., Vivek K. Arora, Kirsten Zickfeld, Shawn J. Marshall, and William J. Merryfield. 2011. "Ongoing climate change following a complete cessation of carbon dioxide emissions." *Nature Geoscience* 4 (2) (February): 83-87. doi:10.1038/ngeo1047.
- Gillis, Justin. 2011. "Figures on Global Climate Show 2010 Tied 2005 as the Hottest Year on Record." *The New York Times*, January 12, sec. Science / Environment.
http://www.nytimes.com/2011/01/13/science/earth/13climate.html?_r=1&emc=eta1
- Giorgi, Filippo, and Raquel Francisco. 2000. "Uncertainties in regional climate change prediction: A regional analysis of ensemble simulations with the HADCM2 coupled AOGCM." *Climate Dynamics* 16 (2-3) (February): 169-182. doi:10.1007/PL00013733.
- Girardin, Martin P., Adam A. Ali, Christopher Carcaillet, Manfred Mudelsee, Igor Drobyshev, Christelle Hély, and Yves Bergeron. 2009. "Heterogeneous response of circumboreal wildfire risk to climate change since the early 1900s." *Global Change Biology* 15 (11) (November): 2751-2769. doi:10.1111/j.1365-2486.2009.01869.x.
- Girardin, Martin P., Adam A. Ali, and Christelle Hély. 2010. "Wildfires in boreal ecosystems: Past, present and some emerging trends." *International Journal of Wildland Fire* 19 (8) (December): 991-995. doi:10.1071/WFv19n8_FO.
- Gleason, Henry Allan. 1922. "The vegetational history of the Middle West." *Annals of the Association of American Geographers* 12 (1): 39-85. doi:10.1080/00045602209356938.
- Glickman, Todd S. 2000. *AMS Glossary of Meteorology*. 2nd ed. Boston, MA: American Meteorological Society, January. <http://amsglossary.allenpress.com/glossary>

Glitzenstein, Jeff S., Charles D. Canham, Mark J. McDonnell, and Donna R. Streng. 1990. "Effects of environment and land-use history on upland forests of the Cary Arboretum, Hudson Valley, New York." *Bulletin of the Torrey Botanical Club* 117 (2) (June): 106–122. doi:10.2307/2997050.

Glitzenstein, Jeff S., William J. Platt, and Donna R. Streng. 1995. "Effects of fire regime and habitat on tree dynamics in north Florida longleaf pine savannas." *Ecological Monographs* 65 (4) (November): 441-476. doi:10.2307/2963498.

Glitzenstein, Jeff S., Donna R. Streng, and Dale D. Wade. 2003. "Fire frequency effects on longleaf pine (*Pinus palustris* P. Miller) vegetation in South Carolina and northeast Florida, USA." *Natural Areas Journal* 23 (1) (January): 22-37. <http://www.naturalarea.org/journal.asp>

Le Goff, Héloïse, Mike D. Flannigan, Yves Bergeron, and Martin P. Girardin. 2007. "Historical fire regime shifts related to climate teleconnections in the Waswanipi area, central Quebec, Canada." *International Journal of Wildland Fire* 16 (5) (October): 607. doi:10.1071/WF06151.

Goldammer, Johann Georg, and Colin Price. 1998. "Potential impacts of climate change on fire regimes in the tropics based on MAGICC and a GISS GCM-derived lightning model." *Climatic Change* 39 (2-3) (July): 273–296. doi:10.1023/A:1005371923658.

Gonzalez, Patrick, Ronald P. Neilson, James M. Lenihan, and Raymond J. Drapek. 2010. "Global patterns in the vulnerability of ecosystems to vegetation shifts due to climate change." *Global Ecology and Biogeography* 19 (6) (November): 755–768. doi:10.1111/j.1466-8238.2010.00558.x.

Goodrick, Scott L., and Deborah E. Hanley. 2009. "Florida wildfire activity and atmospheric teleconnections." *International Journal of Wildland Fire* 18 (4) (June): 476-482. doi:10.1071/WF07034.

Gorte, Julie K., and Ross W. Gorte. 1979. *Application of economic techniques to fire management - A status review and evaluation*. General Technical Report. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station. <http://www.treesearch.fs.fed.us/pubs/34302>

Gorte, Ross W. 2000. *Forest fire protection (CRS Report for Congress)*. CRS Report for Congress. Washington, DC: Congressional Research Service, December. <http://www.cnre.org/nle/crsreports/forests/>. www.cnre.org/nle/crsreports/forests/for-34.pdf

Gosz, James R., and Peter J. H. Sharpe. 1989. "Broad-scale concepts for interactions of climate, topography, and biota at biome transitions." *Landscape Ecology* 3 (3-4) (December): 229-243. doi:10.1007/BF00131541.

Govender, Navashni, Winston S. W. Trollope, and Brian W. van Wilgen. 2006. "The effect of fire season, fire frequency, rainfall and management on fire intensity in savanna vegetation in South Africa." *Journal of Applied Ecology* 43 (4) (August): 748–758. doi:10.1111/j.1365-2664.2006.01184.x.

Graham, Nicholas E., Malcolm K. Hughes, Caspar M. Ammann, Kim M. Cobb, Martin P. Hoerling, Douglas J. Kennett, James P. Kennett, et al. 2007. "Tropical Pacific – mid-latitude teleconnections in medieval times." *Climatic Change* 83 (1-2) (July): 241-285. doi:10.1007/s10584-007-9239-2.

Graham, Robin Lambert, Monica G. Turner, and Virginia H. Dale. 1990. "How increasing CO₂ and climate change affect forests." *BioScience* 40 (8) (September): 575-587. doi:10.2307/1311298.

Grala, Katarzyna, and William H. Cooke. 2010. "Spatial and temporal characteristics of wildfires in Mississippi, USA." *International Journal of Wildland Fire* 19 (1) (February): 14-28. doi:10.1071/WF08104.

Grasby, Stephen E., Hamed Sanei, and Benoit Beauchamp. 2011. "Catastrophic dispersion of coal fly ash into oceans during the latest Permian extinction." *Nature Geoscience* 4 (2) (February): 104–107. doi:10.1038/ngeo1069.

Gray, Lesley J., Jürg Beer, Marvin Geller, Joanna D. Haigh, Michael Lockwood, Katja Matthes, Ulrich Cubasch, et al. 2010. "Solar influences on climate." *Reviews of Geophysics* 48 (4) (October): RG4001 (53 p.). doi:10.1029/2009RG000282.

Greene, Charles H., D. James Baker, and Daniel H. Miller. 2010. "A very inconvenient truth." *Oceanography* 23 (1) (March): 214–218.

Greene, S. W. 1931. "The forest that fire made." *American Forests* 37 (10) (October): 583–584, 618.

Greenlee, Jason M., and Jean H. Langenheim. 1990. "Historic fire regimes and their relation to vegetation patterns in the Monterey Bay Area of California." *American Midland Naturalist* 124 (2) (October): 239–253. doi:10.2307/2426173.

Greenville, Aaron C., Chris R. Dickman, Glenda M. Wardle, and Mike Letnic. 2009. "The fire history of an arid grassland: The influence of antecedent rainfall and ENSO." *International Journal of Wildland Fire* 18 (6) (September): 631-639. doi:10.1071/WF08093.

Grigg, Laurie D., and Cathy Whitlock. 1998. "Late-glacial vegetation and climate change in western Oregon." *Quaternary Research* 49 (3) (May): 287-298. doi:10.1006/qres.1998.1966.

Grimm, Eric C. 1984. "Fire and other factors controlling the Big Woods vegetation of Minnesota in the mid-nineteenth century." *Ecological Monographs* 54 (3) (September): 291. doi:10.2307/1942499.

Grissino Mayer, Henri D., and Thomas W. Swetnam. 2000. "Century scale climate forcing of fire regimes in the American Southwest." *The Holocene* 10 (2) (February): 213-220. doi:10.1191/095968300668451235.

Grissino-Mayer, Henri D., William H. Romme, M. Lisa Floyd, and David D. Hanna. 2004. "Climatic and human influences on fire regimes of the southern San Juan Mountains, Colorado, USA." *Ecology* 85 (6) (June): 1708–1724. doi:10.1890/02-0425.

van Groenigen, Kees Jan, Craig W. Osenberg, and Bruce A. Hungate. 2011. "Increased soil emissions of potent greenhouse gases under increased atmospheric CO₂." *Nature* 475 (7355) (July 14): 214-216. doi:10.1038/nature10176.

de Groot, William J., Peter M. Bothwell, D. H. Carlsson, and Kimberley A. Logan. 2003. "Simulating the effects of future fire regimes on western Canadian boreal forests." *Journal of Vegetation Science* 14 (3) (June): 355–364. doi:10.1111/j.1654-1103.2003.tb02161.x.

de Groot, William J., Robert D. Field, Michael A. Brady, Orbita Roswintiarti, and Maznorizan Mohamad. 2007. "Development of the Indonesian and Malaysian fire danger rating systems." *Mitigation and Adaptation Strategies for Global Change* 12 (1 (Special Issue on Southeast Asian Fire)) (January): 165-180. doi:10.1007/s11027-006-9043-8.

de Groot, William J., Janet M. Pritchard, and Timothy J. Lynham. 2009. "Forest floor fuel consumption and carbon emissions in Canadian boreal forest fires." *Canadian Journal of Forest Research* 39 (2) (February): 367–382. doi:10.1139/X08-192.

Grossman, Dennis H., Don Faber-Langendoen, Alan S. Weakley, Mark Anderson, Patrick Bourgeron, Ralph Crawford, Kathleen Goodin, et al. 1998. *International classification of ecological communities: Terrestrial vegetation of the United States*. Vol. 1. 2 vols. Arlington, Virginia: The Nature Conservancy.
<http://www.natureserve.org/explorer/classeco.htm>

Grove, Matt. 2011. "Change and variability in Plio-Pleistocene climates: modelling the hominin response." *Journal of Archaeological Science* 38 (November): 3038-3047. doi:10.1016/j.jas.2011.07.002.

Grove, Richard H. 2007. "The Great El Niño of 1789-93 and its global consequences: Reconstructing an extreme climate event in world environmental history." *The Medieval History Journal* 10 (1-2) (October): 75-98. doi:10.1177/097194580701000203.

Gruell, G.E. 1999. Historical and modern roles of fire in pinyon-juniper. In , RMRS-P-9:24-28. USDA Forest Service, Rocky Mountain Research Station.

Guetter, Peter J., and John E. Kutzbach. 1990. "A modified Köppen classification applied to model simulations of glacial and interglacial climates." *Climatic Change* 16 (2) (April): 193–215. doi:10.1007/BF00134657.

Gustafson, Eric J., Anatoly Z. Shvidenko, Brian R. Sturtevant, and Robert M. Scheller. 2010. "Predicting global change effects on forest biomass and composition in south-central Siberia." *Ecological Applications* 20 (3) (April): 700-715. <http://www.nrs.fs.fed.us/pubs/34928>. doi:10.1890/08-1693.1.

Guyette, Richard P., and Bruce E. Cutter. 1991. "Tree-ring analysis of fire history of a post oak savanna in the Missouri Ozarks." *Natural Areas Journal* 11 (2): 93–99.

Guyette, Richard P., and Daniel C. Dey. 2000. Humans, topography, and wildland fire: The ingredients for long-term patterns in ecosystems. In *Proceedings: Workshop on Fire, People, and the Central Hardwoods Landscape*, 28–35. General Technical Report NE-274. Newtown Square, PA: United States Department of Agriculture, Forest Service, Northeastern Research Station, September.

<http://www.treesearch.fs.fed.us/pubs/12120>

Guyette, Richard P., and Martin A. Spetich. 2003. "Fire history of oak-pine forests in the Lower Boston Mountains, Arkansas, USA." *Forest Ecology and Management* 180 (1-3) (July 17): 463–474. doi:10.1016/S0378-1127(02)00613-8.

Guyette, Richard P., Daniel C. Dey, and Michael C. Stambaugh. 2003. "Fire and human history of a barren-forest mosaic in southern Indiana." *The American Midland Naturalist* 149 (1): 21–34. doi:10.1674/0003-0031(2003)149[0021:FAHHOA]2.0.CO;2.

Guyette, Richard P., Rose-Marie Muzika, and Daniel C. Dey. 2002. "Dynamics of an anthropogenic fire regime." *Ecosystems* 5 (5) (August): 472–486.

Guyette, Richard P., Martin A. Spetich, and Michael C. Stambaugh. 2006. "Historic fire regime dynamics and forcing factors in the Boston Mountains, Arkansas, USA." *Forest Ecology and Management* 234 (1-3) (October 1): 293–304. <http://treesearch.fs.fed.us/pubs/24566>. doi:10.1016/j.foreco.2006.07.016

Hadley, George. 1735. "Concerning the cause of the general trade-winds." *Philosophical Transactions* 39 (1735 - 1736 (Number 437)) (January): 58–62. doi:10.1098/rstl.1735.0014.

Haines, Donald A., and Rodney W. Sando. 1969. *Climatic conditions preceding historically great fires in the North Central Region*. Research Paper. St. Paul, MN: U.S. Dept. of Agriculture, Forest Service, North Central Forest Experiment Station. <http://ncrs.fs.fed.us/pubs/viewpub.asp?key=555>

Haines, Terry K., Rodney L. Busby, and David A. Cleaves. 2001. "Prescribed burning in the South: Trends, purpose, and barriers." *Southern Journal of Applied Forestry* 25 (4) (November): 149–153. <http://www.treesearch.fs.fed.us/pubs/2897>

Hallett, Douglas J., Dana S. Lepofsky, Rolf W. Mathewes, and Kenneth P. Lertzman. 2003. "11 000 years of fire history and climate in the mountain hemlock rain forests of southwestern British Columbia based on sedimentary charcoal." *Canadian Journal of Forest Research* 33 (2) (February): 292–312. doi:10.1139/X02-177.

Hallett, Douglas J., and R. Scott Anderson. 2010. "Paleofire reconstruction for high-elevation forests in the Sierra Nevada, California, with implications for wildfire synchrony and climate variability in the late Holocene." *Quaternary Research* 73 (2) (March): 180-190. doi:10.1016/j.yqres.2009.11.008.

Hamel, Paul B., and Edward R. Buckner. 1998. How far could a squirrel travel in the treetops?: A prehistory of the southern forest. In *Prehistory of the Southern Forest*, 63:309–315. Orlando, FL.: Washington, DC: Wildlife Management Institute, March 20. <http://westinstenv.org/histwl/2010/02/21/how-far-could-a-squirrel-travel-in-the-treetops-a-prehistory-of-the-southern-forest/>

Hammett, Julia E. 1992. "The shapes of adaptation: Historical ecology of anthropogenic landscapes in the southeastern United States." *Landscape Ecology* 7 (2) (June): 121-135. doi:10.1007/BF02418943.

Hann, Wendel J., and David L. Bunnell. 2001. "Fire and land management planning and implementation across multiple scales." *International Journal of Wildland Fire* 10 (4): 389–403. doi:10.1071/WF01037.

Hannah, Lee, Guy F. Midgley, and D. Millar. 2002. "Climate change-integrated conservation strategies." *Global Ecology and Biogeography* 11 (6) (November): 485–495. doi:10.1046/j.1466-822X.2002.00306.x.

Hansen, James, D. Johnson, A. Lacis, Sergej Lebedeff, P. Lee, D. Rind, and Gary Russell. 1981. "Climate impact of increasing atmospheric carbon dioxide." *Science* 213 (4511) (August 28): 957-966. doi:10.1126/science.213.4511.957.

Hansen, James, Reto Ruedy, Makiko Sato, and Ken Lo. 2010. "Global surface temperature change." *Reviews of Geophysics* 48 (4) (December): RG4004 (29 p.). <http://westcoastclimateequity.org/2010/06/02/dr-james-hansen-global-surface-temperature-change-summary/> doi:10.1029/2010RG000345.

Hardy, Colin C. 2005. "Wildland fire hazard and risk: Problems, definitions, and context." *Forest Ecology and Management* 211 (1-2) (June 6): 73-82. doi:10.1016/j.foreco.2005.01.029.

Hardy, Colin C., James P. Menakis, Donald G. Long, James K. Brown, and David L. Bunnell. 1998. Mapping historic fire regimes for the western United States: Integrating remote sensing and biophysical data. In *Natural Resources Management Using Remote Sensing and Gis: Proceedings of the 7th Forest Service Remote Sensing Applications Conference*, 288-300. Bethesda, Md.: American Society for

Photogrammetry and Remote Sensing (Jerry Dean Greer, editor).

http://www.fs.fed.us/eng/rsac/rs98/final_program3.html

Harmon, Mark. 1982. "Fire history of the westernmost portion of Great Smoky Mountains National Park." *Bulletin of the Torrey Botanical Club* 109 (1) (March): 74–79. doi:10.2307/2484470.

Harrison, Sandy P., and Maria Fernanda Sanchez Goñi. 2010. "Global patterns of vegetation response to millennial-scale variability and rapid climate change during the last glacial period." *Quaternary Science Reviews* 29 (21-22) (October): 2957-2980. doi:10.1016/j.quascirev.2010.07.016.

Harrison, Sandy P., Jennifer R. Marlon, and Patrick J. Bartlein. 2010. Fire in the Earth System. In *Changing Climates, Earth Systems and Society*, 21–48. 1st ed. International Year of Planet Earth. Dordrecht, Heidelberg, London, New York: Springer. <http://www.springerlink.com/content/t13341464245456u/>

Hawkins, Ed, and Rowan Sutton. 2009. "The potential to narrow uncertainty in regional climate predictions." *Bulletin of the American Meteorological Society* 90 (8) (August): 1095–1107. doi:10.1175/2009BAMS2607.1.

He, Hong S., David J. Mladenoff, and Thomas R. Crow. 1999. "Linking an ecosystem model and a landscape model to study forest species response to climate warming." *Ecological Modelling* 114 (2-3) (January 1): 213-233. doi:10.1016/S0304-3800(98)00147-1.

Heald, Colette L., and Dominick V. Spracklen. 2009. "Atmospheric budget of primary biological aerosol particles from fungal spores." *Geophysical Research Letters* 36 (9) (May): L09806 (5 p.). doi:10.1029/2009GL037493.

Healey, Sean P., Warren B. Cohen, Thomas A. Spies, Melinda Moeur, Dirk Pflugmacher, M. German Whitley, and Michael Lefsky. 2008. "The relative impact of harvest and fire upon landscape-level dynamics of older forests: Lessons from the Northwest Forest Plan." *Ecosystems* 11 (7) (November): 1106-1119. doi:10.1007/s10021-008-9182-8.

Hebda, Richard J., and Rolf W. Mathewes. 1984. "Holocene history of cedar and Native Indian cultures of the North American Pacific Coast." *Science* 225 (4663) (August 17): 711 -713. doi:10.1126/science.225.4663.711.

Hegerl, Gabriele, and Francis Zwiers. 2011. "Use of models in detection and attribution of climate change." *Wiley Interdisciplinary Reviews: Climate Change* 2 (4) (August): 570–591. doi:10.1002/wcc.121.

Hegerl, Gabriele, Juerg Luterbacher, Fidel González-Rouco, Simon F. B. Tett, Thomas Crowley, and Elena Xoplaki. 2011. "Influence of human and natural forcing on European seasonal temperatures." *Nature Geoscience* 4 (2) (February): 99–103. doi:10.1038/ngeo1057.

Heilman, Warren E., and Xindi Bian. 2010. "Turbulent kinetic energy during wildfires in the north central and north-eastern U.S." *International Journal of Wildland Fire* 19 (3) (May): 346–363. doi:10.1071/WF08076.

Heimann, Martin. 2011. "Atmospheric science: Enigma of the recent methane budget." *Nature* 476 (7359) (August 11): 157-158. doi:10.1038/476157a.

Heinselman, Miron L. 1981. Fire intensity and frequency as factors in the distribution and structure of northern ecosystems. In *Fire regimes and ecosystem properties*, 7-57. General Technical Report WO-26.

Honolulu, Hawaii: DC: U.S. Department of Agriculture, Forest Service.
<http://www.npwrc.usgs.gov/resource/literatr/firewild/bib/103.htm>

Heinselman, Miron L. 1973. "Fire in the virgin forests of the Boundary Waters Canoe Area, Minnesota." *Quaternary Research* 3 (3) (October): 329-382. doi:10.1016/0033-5894(73)90003-3.

Hély, Christelle, C. Marie-Josée Fortin, Kerry R. Anderson, and Yves Bergeron. 2010. "Landscape composition influences local pattern of fire size in the eastern Canadian boreal forest: Role of weather and landscape mosaic on fire size distribution in mixedwood boreal forest using the Prescribed Fire Analysis System." *International Journal of Wildland Fire* 19 (8) (December): 1099–1109. doi:10.1071/WF09112.

Henderson, Joseph P. 2006. Dendroclimatological analysis and fire history of longleaf pine (*Pinus palustris* Mill.) in the Atlantic and Gulf Coastal Plain. A Dissertation Presented for the Doctor of Philosophy Degree, Knoxville, Tennessee: The University of Tennessee, August.
<http://web.utk.edu/~grissino/downloads/Joe%20Henderson%20dissertation.pdf>

Henderson, Norman R., and James N. Long. 1984. "A comparison of stand structure and fire history in two black oak woodlands in northwestern Indiana." *Botanical Gazette* 145 (2) (June): 222–228.

Henderson-Sellers, Ann, and Kendal McGuffie. 1995. "Global climate models and 'dynamic' vegetation changes." *Global Change Biology* 1 (1) (February): 63–75. doi:10.1111/j.1365-2486.1995.tb00007.x.

Herschel, William. 1801. "Observations tending to investigate the nature of the Sun, in order to find the causes or symptoms of its variable emission of light and heat; with remarks on the use that may possibly be drawn from solar observations." *Philosophical Transactions of the Royal Society of London* 91 (January 1): 265-318. doi:10.1098/rstl.1801.0015.

Hess, Jason C., Carven A. Scott, Gary L. Hufford, and Michael D. Fleming. 2001. "El Niño and its impact on fire weather conditions in Alaska." *International Journal of Wildland Fire* 10 (1) (January): 1-13. doi:10.1071/WF01007.

Hessburg, Paul F., James K. Agee, and Jerry F. Franklin. 2005. "Dry forests and wildland fires of the inland Northwest USA: Contrasting the landscape ecology of the pre-settlement and modern eras." *Forest Ecology and Management* 211 (1-2) (June 6): 117-139. doi:10.1016/j.foreco.2005.02.016.

Hessburg, Paul F., and James K. Agee. 2003. "An environmental narrative of inland northwest United States forests, 1800–2000." *Forest Ecology and Management* 178 (1-2) (June 3): 23–59.
<http://www.sciencedirect.com/science/article/pii/S0378112703000525> doi:10.1016/S0378-1127(03)00052-5.

Hessl, Amy E. 2011. "Pathways for climate change effects on fire: Models, data, and uncertainties." *Progress in Physical Geography* 35 (3) (June): 393 -407. doi:10.1177/0309133311407654.

Hessl, Amy E., Don McKenzie, and Richard Schellhaas. 2004. "Drought and Pacific Decadal Oscillation linked to fire occurrence in the Inland Pacific Northwest." *Ecological Applications* 14 (2) (April): 425-442. doi:10.1890/03-5019.

Heyerdahl, Emily K., Linda B. Brubaker, and James K. Agee. 2001. "Spatial controls of historical fire regimes: A multiscale example from the interior West, USA." *Ecology* 82 (3) (March): 660-678. doi:10.1890/0012-9658(2001)082[0660:SCOHFR]2.0.CO;2.

Heyerdahl, Emily K., Penelope Morgan, and James P. Riser II. 2008. "Multi-season climate synchronized historical fires in dry forests (1650-1900), northern Rockies, USA." *Ecology* 89 (3) (March): 705–716. doi:10.1890/06-2047.1.

Heyerdahl, Emily K., Linda B. Brubaker, and James K. Agee. 2002. "Annual and decadal climate forcing of historical fire regimes in the interior Pacific Northwest, USA." *The Holocene* 12 (5) (July): 597-604. doi:10.1191/0959683602hl570rp.

Heyerdahl, Emily K., Donald McKenzie, Lori D. Daniels, Amy E. Hessl, Jeremy S. Littell, and Nathan J. Mantua. 2008. "Climate drivers of regionally synchronous fires in the inland Northwest (1651–1900)." *International Journal of Wildland Fire* 17 (1) (February): 40. doi:10.1071/WF07024.

Hibbard, Kathy A., Gerald A. Meehl, Peter M. Cox, and Pierre Friedlingstein. 2007. "A strategy for climate change stabilization experiments." *EOS Transactions American Geophysical Union* 88 (20) (May 15): 217, 219, 221. doi:doi:10.1029/2007EO200002.

Higgins, Kenneth F. 1984. "Lightning fires in North Dakota grasslands and in pine-savanna lands of South Dakota and Montana." *Journal of Range Management* 37 (2) (March): 100–103.

Higuera, Philip E., Linda B. Brubaker, Patricia M. Anderson, Thomas A. Brown, Alison T. Kennedy, and Feng Sheng Hu. 2008. "Frequent fires in ancient shrub tundra: Implications of paleorecords for Arctic environmental change." Ed. Jerome Chave. *PLoS ONE* 3 (3) (March): e0001744 (7 p.). doi:10.1371/journal.pone.0001744.

Higuera, Philip E., Linda B. Brubaker, Patricia M. Anderson, Feng Sheng Hu, and Thomas A. Brown. 2009. "Vegetation mediated the impacts of postglacial climate change on fire regimes in the south-central Brooks Range, Alaska." *Ecological Monographs* 79 (2) (May): 201–219. doi:10.1890/07-2019.1.

Higuera, Philip E., Daniel G. Gavin, Paul D. Henne, and Ryan F. Kelly. 2010. "Recent advances in the analysis and interpretation of sediment-charcoal records." *PAGES Newsletter* 18 (2) (August): 57-59.

Higuera, Philip E., Daniel G. Gavin, Patrick J. Bartlein, and Douglas J. Hallett. 2010. "Peak detection in sediment–charcoal records: Impacts of alternative data analysis methods on fire-history interpretations." *International Journal of Wildland Fire* 19 (8) (December): 996–1014. doi:10.1071/WF09134.

Hobbs, Richard J., and Laura F. Huenneke. 1992. "Disturbance, diversity, and invasion: Implications for conservation." *Conservation Biology* 6 (3) (September): 324-337. doi:10.1046/j.1523-1739.1992.06030324.x.

Hofmann, David J., James H. Butler, Edward J. Dlugokencky, James W. Elkins, Kenneth Masarie, Stephen A. Montzka, and Pieter Tans. 2006. "The role of carbon dioxide in climate forcing from 1979 to 2004: Introduction of the Annual Greenhouse Gas Index." *Tellus B* 58 (5) (November): 614-619. doi:10.1111/j.1600-0889.2006.00201.x.

Hofmann, David J., James H. Butler, and Pieter P. Tans. 2009. "A new look at atmospheric carbon dioxide." *Atmospheric Environment* 43 (12) (April): 2084-2086. doi:10.1016/j.atmosenv.2008.12.028.

Holdridge, Leslie R. 1947. "Determination of world plant formations from simple climatic data." *Science* 105 (2727) (April 4): 367-368. doi:10.1126/science.105.2727.367.

Holmes, Thomas P., Jeffrey P. Prestemon, John M. Pye, David T. Butry, D. Evan Mercer, and Karen L. Abt. 2004. Using size-frequency distributions to analyze fire regimes in Florida. In *Fire in Temperate, Boreal, and Montane Ecosystems*, 88-94. Fire Ecology Conference Proceedings. Tallahassee, Florida: Tall Timbers Research Station. <http://www.treesearch.fs.fed.us/pubs/7813>

Holz, Andrés, and Thomas T. Veblen. 2011. "Variability in the Southern Annular Mode determines wildfire activity in Patagonia." *Geophysical Research Letters* 38 (14) (July): L14710 (6 p.). doi:10.1029/2011GL047674.

Hoskins, Brian J., and Tercio Ambrizzi. 1993. "Rossby wave propagation on a realistic longitudinally varying flow." *Journal of the Atmospheric Sciences* 50 (12) (June): 1661-1671. doi:10.1175/1520-0469(1993)050<1661:RWPOAR>2.0.CO;2.

Hoss, Jennifer A., Charles W. Lafon, Henri D. Grissino-Mayer, Serena R. Aldrich, and Georgina G. DeWeese. 2008. "Fire history of a temperate forest with an endemic fire-dependent herb." *Physical Geography* 29 (5) (October): 424-441. doi:10.2747/0272-3646.29.5.424.

Host, George E., Philip L. Polzer, David J. Mladenoff, Mark A. White, and Thomas R. Crow. 1996. "A quantitative approach to developing regional ecosystem classifications." *Ecological Applications* 6 (2) (May): 608–618. doi:10.2307/2269395.

Hostetler, Steven W., Patrick J. Bartlein, and Justin O. Holman. 2006. *Atlas of climatic controls of wildfire in the western United States*. Scientific Investigations Report. US Geological Survey Scientific Investigations Report. Reston, Virginia: U.S. Department of the Interior, U.S. Geological Survey. <http://pubs.usgs.gov/sir/2006/5139/>

Hotchkiss, Sara C., Randy Calcote, and Elizabeth A. Lynch. 2007. "Response of vegetation and fire to Little Ice Age climate change: Regional continuity and landscape heterogeneity." *Landscape Ecology* 22 (S1) (December): 25-41. doi:10.1007/s10980-007-9133-3.

Houghton, John T., Bruce A. Callander, and Shelagh K. Varney, eds. 1992. *Climate Change 1992: The supplementary report to the IPCC scientific assessment*. 1st ed. Cambridge, New York, and Victoria: Cambridge University Press. http://www.ipcc.ch/publications_and_data/publications_ipcc_supplementary_report_1992_wg1.shtml

Houze Jr, Robert A., Kristen L. Rasmussen, Socorro Medina, Stacy R. Brodzik, and Ulrike Romatschke. 2011. "Anomalous atmospheric events leading to the summer 2010 floods in Pakistan." *Bulletin of the American Meteorological Society* 92 (3) (March): 291–298. doi:10.1175/2010BAMS3173.1.

Howe, Henry F. 2000. "Grass response to seasonal burns in experimental plantings." *Journal of Range Management* 53 (4) (July): 437–441. doi:10.2307/4003757.

Hu, Feng Sheng, Linda B. Brubaker, Daniel G. Gavin, Philip E. Higuera, Jason A. Lynch, T. Scott Rupp, and Willy Tinner. 2006. "How climate and vegetation influence the fire regime of the Alaskan boreal biome: The Holocene perspective." *Mitigation and Adaptation Strategies for Global Change* 11 (4) (July): 829–846. doi:10.1007/s11027-005-9015-4.

Hu, Feng Sheng, Philip E. Higuera, John E. Walsh, William L. Chapman, Paul A. Duffy, Linda B. Brubaker, and Melissa L. Chipman. 2010. "Tundra burning in Alaska: Linkages to climatic change and sea ice retreat." *Journal of Geophysical Research* 115 (G4) (October): G04002 (8 p.). doi:10.1029/2009JG001270.

- Huang, Jian-Guo, Yves Bergeron, Lihong Zhai, and Bernhard Denneler. 2011. "Variation in intra-annual radial growth (xylem formation) of *Picea mariana* (Pinaceae) along a latitudinal gradient in western Quebec, Canada." *American Journal of Botany* 98 (5) (May): 792-800. doi:10.3732/ajb.1000074.
- Huffman, James L. 1977. "A history of forest policy in the United States." *Environmental Law* 8: 239-280. Environmental law / Northwestern School of Law of Lewis and Clark College.
- Hughes, Mimi, and Alex Hall. 2010. "Local and synoptic mechanisms causing Southern California's Santa Ana winds." *Climate Dynamics* 34 (6) (May): 847-857. doi:10.1007/s00382-009-0650-4.
- Hughes, Mimi, Alex Hall, and Jinwon Kim. 2009. Anthropogenic reduction of Santa Ana winds. In *Proceedings of the American Geophysical Union 2008 Fall Meeting*, 29 p. Los Angeles, CA: California Energy Commission, California Climate Change Center, August.
<http://adsabs.harvard.edu/abs/2008AGUFMG22A..05H>
- . 2010. Human-induced changes in wind, temperature and relative humidity during Santa Ana events. Submitted to PIER Climate change special issue of Climatic Change. UCLA Department of Atmospheric and Oceanic Sciences. <http://www.atmos.ucla.edu/csrl/spotlight-01-2010.html>
- Hulme, Mike, Eduardo Zorita, Thomas F. Stocker, Jeff Price, and John R. Christy. 2010. "IPCC: Cherish it, tweak it or scrap it?" *Nature* 463 (7282) (February 11): 730-732. doi:10.1038/463730a.
- Hurrell, James W., and Harry van Loon. 1997. "Decadal variations in climate associated with the North Atlantic Oscillation." *Climatic Change* 36 (3-4) (July): 301–326. doi:10.1023/A:1005314315270.
- Hurrell, James, Gerald A. Meehl, David Bader, Thomas L. Delworth, Ben Kirtman, and Bruce Wielicki. 2009. "A unified modeling approach to climate system prediction." *Bulletin of the American Meteorological Society* 90 (12) (December): 1819-1832. doi:10.1175/2009BAMS2752.1.
- Hurteau, Matthew D., George W. Koch, and Bruce A. Hungate. 2008. "Carbon protection and fire risk reduction: Toward a full accounting of forest carbon offsets." *Frontiers in Ecology and the Environment* 6 (9) (November): 493–498. doi:10.1890/070187.
- Hutchinson, Todd F., Robert P. Long, Robert D. Ford, and Elaine Kennedy Sutherland. 2008. "Fire history and the establishment of oaks and maples in second-growth forests." *Canadian Journal of Forest Research* 38 (5) (May): 1184–1198. doi:10.1139/X07-216.
- International Energy Agency. 2010. *CO₂ emissions from fuel combustion - Highlights*. To provide input to and support for the UN process. Paris, France: International Energy Agency (IEA).
<http://www.iea.org/co2highlights/>
- IPCC. 2007. *Climate Change 2007: Synthesis report: Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Ed. The Core Writing Team, Rajendra K. Pachauri, and Andy Reisinger. Climate Change. Geneva, Switzerland: IPCC Secretariat. http://www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_synthesis_report.htm
- IPCC WG I. 2001. *Climate Change 2001: The scientific basis: Contribution of Working Group I to the Third Assessment Report of the Intergovernmental Panel on Climate Change*. Ed. John T. Houghton, Yihui Ding, David J. Griggs, Maria Noguer, Paul J. van der Linden, Xiaosu Dai, Kathy Maskell, and Cathy A.

Johnson. Climate Change. Cambridge, United Kingdom: New York, NY, USA: Cambridge University Press.
http://www.grida.no/publications/other/ipcc_tar/?src=/climate/ipcc_tar/wg1/index.htm

—. 2007. *Climate Change 2007: The physical science basis: Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Ed. Susan Solomon, Dahe Qin, Martin Manning, Zhenlin Chen, Melinda Marquis, Kristen B. Averyt, Melinda M.B. Tignor, and Henry LeRoy Miller, Jr. Climate Change. Cambridge, United Kingdom: New York, NY, USA: Cambridge University Press.
http://www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_wg1_report_the_physical_science_basis.htm

IPCC WG II. 2007. *Climate Change 2007: Impacts, adaptation and vulnerability: Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Ed. Martin L. Parry, Osvaldo F. Canziani, Jean P. Palutikof, Paul J. van der Linden, and Clair E. Hanson. Climate Change. Cambridge, United Kingdom: Cambridge University Press.
http://www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_wg2_report_impacts_adaptation_and_vulnerability.htm

IPCC WG III. 2007. *Climate Change 2007: Mitigation of climate change: Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Ed. Bert Metz, Ogunlade R. Davidson, Peter R. Bosch, Rutu Dave, and Leo A. Meyer. Climate Change. Cambridge University Press. http://www.ipcc.ch/publications_and_data/ar4/wg3/en/contents.html

Isaksen, Ivar S. A., and Stig B. Dalsøren. 2011. "Getting a better estimate of an atmospheric radical." *Science* 331 (6013) (January 7): 38-39. doi:10.1126/science.1199773.

Ise, John. 1920. *The United States forest policy*. 1st ed. New Haven, CT: Yale University Press.
<http://ir.library.oregonstate.edu/xmlui/handle/1957/9959?show=full>

Ison, Cecil R. 2000. Fire on the edge: Prehistoric fire along the escarpment zone of the Cumberland Plateau. In *Proceedings: Workshop on Fire, People, and the Central Hardwoods Landscape*, 36-45. General Technical Report NE-274. Newtown Square, PA: United States Department of Agriculture, Forest Service, Northeastern Research Station, September. <http://www.treesearch.fs.fed.us/pubs/23074>

Iverson, Louis R., and Anantha M. Prasad. 1998. "Predicting abundance of 80 tree species following climate change in the eastern United States." *Ecological Monographs* 68 (4) (November): 465–485. <http://nrs.fs.fed.us/pubs/7930> doi:10.1890/0012-9615(1998)068[0465:PAOTSF]2.0.CO;2.

—. 2001. "Potential changes in tree species richness and forest community types following climate change." *Ecosystems* 4 (3) (April): 186–199. doi:10.1007/s10021-001-0003-6.

—. 2002. "Potential redistribution of tree species habitat under five climate change scenarios in the eastern US." *Forest Ecology and Management* 155 (1-3) (January): 205–222. doi:10.1016/S0378-1127(01)00559-X.

Iverson, Louis R., and Paul G. Risser. 1987. "Analyzing long-term changes in vegetation with geographic information system and remotely sensed data." *Advances in Space Research* 7 (11): 183–194. doi:10.1016/0273-1177(87)90311-5.

Iverson, Louis R., Anantha M. Prasad, and Mark W. Schwartz. 1999. "Modeling potential future individual tree-species distributions in the eastern United States under a climate change scenario: A case

- study with *Pinus virginiana*." *Ecological Modelling* 115 (1) (February): 77–93. <http://www.treesearch.fs.fed.us/pubs/22436>. doi:10.1016/S0304-3800(98)00200-2.
- Iverson, Louis R., Mark W. Schwartz, and Anantha M. Prasad. 2004. "How fast and far might tree species migrate in the eastern United States due to climate change?" *Global Ecology and Biogeography* 13 (3) (May): 209–219. <http://www.treesearch.fs.fed.us/pubs/9410> doi:10.1111/j.1466-822X.2004.00093.x.
- Iverson, Louis R., Anantha M. Prasad, Stephen N. Matthews, and Matthew P. Peters. 2010. Merger of three modeling approaches to assess potential effects of climate change on trees in the eastern United States. In *Forest landscapes and global change: New frontiers in management, conservation and restoration: Proceedings*, 135–140. Bragança, Portugal: Institute of Politecnico de Braganca Portugal. <http://www.treesearch.fs.fed.us/pubs/36584>
- Jacob, Daniel J., and Darrell A. Winner. 2009. "Effect of climate change on air quality." *Atmospheric Environment* 43 (1) (January): 51–63. doi:10.1016/j.atmosenv.2008.09.051.
- Jacobson, George L., and Eric C. Grimm. 1986. "A numerical analysis of Holocene forest and prairie vegetation in central Minnesota." *Ecology* 67 (4) (August): 958–966. doi:10.2307/1939818.
- Jain, Theresa B., and Russell T. Graham. 2004. "Tongue-Tied: Confused meanings for common fire terminology can lead to fuels mismanagement. A new framework is needed to clarify and communicate the concepts." *WILDFIRE magazine*, July.
- Johnson, A. Sydney, and Philip E. Hale. 2002. *The historical foundations of prescribed burning for wildlife: A southeastern perspective*. General Technical Report. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northeastern Research Station. <http://www.treesearch.fs.fed.us/pubs/3164> <http://www.treesearch.fs.fed.us/pubs/19091>
- Johnson, Donald Lee. 1977. "The late Quaternary climate of coastal California: Evidence for an ice age refugium." *Quaternary Research* 8 (2) (September): 154–179. doi:10.1016/0033-5894(77)90043-6.
- Johnson, Edward A., and Charles E. Van Wagner. 1985. "The theory and use of two fire history models." *Canadian Journal of Forest Research* 15 (1) (February): 214–220. doi:10.1139/x85-039.
- Johnson, Edward A. 1979. "Fire recurrence in the subarctic and its implications for vegetation composition." *Canadian Journal of Botany* 57 (12) (June): 1374–1379. doi:10.1139/b79-171.
- . 1996. *Fire and vegetation dynamics: Studies from the North American boreal forest*. reprint, illustrated. Cambridge Studies in Ecology. Cambridge, United Kingdom: New York, NY, USA: Cambridge University Press. <http://ebooks.cambridge.org/ebook.jsf?bid=CBO9780511623516>
- Johnson, Kathleen R. 2011. "Palaeoclimate: Long-distance relationship." *Nature Geoscience* 4 (7) (July): 426–427. doi:10.1038/ngeo1190.
- Johnstone, Jill F., Teresa N. Hollingsworth, F. Stuart Chapin, and Michelle C. Mack. 2010. "Changes in fire regime break the legacy lock on successional trajectories in Alaskan boreal forest." *Global Change Biology* 16 (4) (April): 1281–1295. doi:10.1111/j.1365-2486.2009.02051.x.
- Johnstone, Jill F., F. Stuart Chapin III, Teresa N. Hollingsworth, Michelle C. Mack, Vladimir Romanovsky, and Merritt Turetsky. 2010. "Fire, climate change, and forest resilience in interior Alaska." *Canadian Journal of Forest Research* 40 (7) (July): 1302–1312. doi:10.1139/X10-061.

Jones, Phil D., and Michael E. Mann. 2004. "Climate over past millennia." *Reviews of Geophysics* 42 (2) (May): RG2002 (42 p.). doi:10.1029/2003RG000143.

Jones, Timothy P., and William G. Chaloner. 1991. "Fossil charcoal, its recognition and palaeoatmospheric significance." *Palaeogeography, Palaeoclimatology, Palaeoecology* 97 (1-2) (December): 39–50. doi:10.1016/0031-0182(91)90180-Y.

Joos, Fortunat, and Renato Spahni. 2008. "Rates of change in natural and anthropogenic radiative forcing over the past 20,000 years." *Proceedings of the National Academy of Sciences* 105 (5) (February 5): 1425-1430. doi:10.1073/pnas.0707386105.

Jorgenson, M. Torre, Vladimir Romanovsky, Jennifer Harden, Yuri Shur, Jonathan O'Donnell, Edward A. G. Schuur, Mikhail Kanevskiy, and Sergei Marchenko. 2010. "Resilience and vulnerability of permafrost to climate change." *Canadian Journal of Forest Research* 40 (7) (July): 1219–1236. doi:10.1139/X10-060.

Jose, Shibu, Eric J. Jokela, and Deborah L. Miller, eds. 2006. *The longleaf pine ecosystem: Ecology, silviculture, and restoration*. 1st ed. Springer Series on Environmental Management. New York, NY: Springer, May. <http://www.springer.com/life+sciences/ecology/book/978-0-387-29655-5>

Joyce, Linda A., Geoffrey M. Blate, Steven G. McNulty, Constance I. Millar, Susanne Moser, Ronald P. Neilson, and David L. White. 2009. "Managing for multiple resources under climate change: National forests." *Environmental Management* 44 (6) (December): 1022–1032. doi:10.1007/s00267-009-9324-6.

Joyce, Linda, Richard Haynes, Rachel White, and R. James Barbour. 2007. Bringing climate change into natural resource management. In *Bringing Climate Change into Natural Resource Management: Proceedings*, 150 p. General Technical Report, PNW-GTR-706. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, March.

<http://www.treesearch.fs.fed.us/pubs/27014>

Jung, Martin, Markus Reichstein, Philippe Ciais, Sonia I. Seneviratne, Justin Sheffield, Michael L. Goulden, Gordon Bonan, et al. 2010. "Recent decline in the global land evapotranspiration trend due to limited moisture supply." *Nature* 467 (7318) (October 21): 951-954. doi:10.1038/nature09396.

Kai, Fuu Ming, Stanley C. Tyler, James T. Randerson, and Donald R. Blake. 2011. "Reduced methane growth rate explained by decreased Northern Hemisphere microbial sources." *Nature* 476 (7359) (August 11): 194-197. doi:10.1038/nature10259.

Kaplan, Jed O., Kristen M. Krumhardt, Erle C. Ellis, William F. Ruddiman, Carsten Lemmen, and Kees Klein Goldewijk. 2011. "Holocene carbon emissions as a result of anthropogenic land cover change." *The Holocene* 21 (5) (August): 775-791. doi:10.1177/0959683610386983.

Karkanas, Panagiotis, Ruth Shack-Gross, Avner Ayalon, Mira Bar-Matthews, Ran Barkai, Amos Frumkin, Avi Gopher, and Mary C. Stiner. 2007. "Evidence for habitual use of fire at the end of the Lower Paleolithic: Site-formation processes at Qesem Cave, Israel." *Journal of Human Evolution* 53 (2) (August): 197-212. doi:10.1016/j.jhevol.2007.04.002.

Karl, Thomas R., Jerry M. Melillo, and Thomas C. Peterson, eds. 2009. *Global climate change impacts in the United States*. 1st ed. Cambridge (England); New York: Cambridge University Press. <http://www.globalchange.gov/what-we-do/assessment/previous-assessments/global-climate-change-impacts-in-the-us-2009>

- Karl, Thomas R. 1986. "The sensitivity of the Palmer Drought Severity Index and Palmer's Z-Index to their calibration coefficients including potential evapotranspiration." *Journal of Climate and Applied Meteorology* 25 (1) (January): 77-86. doi:10.1175/1520-0450(1986)025<0077:TSOTPD>2.0.CO;2.
- Kasischke, Eric S., and Merritt R. Turetsky. 2006. "Recent changes in the fire regime across the North American boreal region—Spatial and temporal patterns of burning across Canada and Alaska." *Geophysical Research Letters* 33 (9) (May): L09703 (5 p.). doi:10.1029/2006GL025677.
- Kasischke, Eric S., David L. Verbyla, T. Scott Rupp, A. David McGuire, Karen A. Murphy, Randi Jandt, Jennifer L. Barnes, et al. 2010. "Alaska's changing fire regime - implications for the vulnerability of its boreal forests." *Canadian Journal of Forest Research* 40 (7) (July): 1313-1324. doi:10.1139/X10-098.
- Kasischke, Eric S., David Williams, and Donald Barry. 2002. "Analysis of the patterns of large fires in the boreal forest region of Alaska." *International Journal of Wildland Fire* 11 (2) (January): 131-144. doi:10.1071/WF02023.
- Kaspi, Yohai, and Tapio Schneider. 2011. "Winter cold of eastern continental boundaries induced by warm ocean waters." *Nature* 471 (7340) (March 31): 621-624. doi:10.1038/nature09924.
- Katz, Richard W. 2002. "Sir Gilbert Walker and a connection between El Niño and statistics." *Statistical Science* 17 (1) (May): 97–112. doi:10.1214/ss/1023799000.
- Katz, Stephen L., Stephanie E. Hampton, Lyubov R. Izmest'eva, and Marianne V. Moore. 2011. "Influence of long-distance climate teleconnection on seasonality of water temperature in the world's largest lake - Lake Baikal, Siberia." Ed. Stuart A. Sandin. *PLoS ONE* 6 (2) (February): e14688 (10 p.). doi:10.1371/journal.pone.0014688.
- Kaufmann, Robert K., Heikki Kauppi, Michael L. Mann, and James H. Stock. 2011. "Reconciling anthropogenic climate change with observed temperature 1998-2008." *Proceedings of the National Academy of Sciences* Published online before print (July 5). doi:10.1073/pnas.1102467108.
<http://www.pnas.org/cgi/doi/10.1073/pnas.1102467108>
- Kaye, Margot W. 2011. "Mesoscale synchrony in quaking aspen establishment across the interior western US." *Forest Ecology and Management* 262 (3) (August 1): 389-397. doi:10.1016/j.foreco.2011.04.003.
- Keane, Robert E., Geoffrey J. Cary, and Russell Parsons. 2003. "Using simulation to map fire regimes: An evaluation of approaches, strategies, and limitations." *International Journal of Wildland Fire* 12 (4): 309-322. doi:10.1071/WF03017.
- Keane, R.E., G.J. Cary, I.D. Davies, M.D. Flannigan, R.H. Gardner, S. Lavorel, J.M. Lenihan, C. Li, and T.S. Rupp. 2004. "A classification of landscape fire succession models: spatial simulations of fire and vegetation dynamics." *Ecological Modelling* 179: 3–27.
- Keating-Bitonti, Caitlin R., Linda C. Ivany, Hagit P. Affek, Peter Douglas, and Scott D. Samson. 2011. "Warm, not super-hot, temperatures in the early Eocene subtropics." *Geology* 39 (8) (August): 771-774. doi:10.1130/G32054.1.
- Keddy, Paul A. 1992. "A pragmatic approach to functional ecology." *Functional Ecology* 6 (6): 621–626. doi:10.2307/2389954.

- Keeley, Jon E. 1982. Distribution of lightning- and man-caused wildfires in California. In *Proceedings of the symposium on dynamics and management of Mediterranean-type ecosystems*, 431-437. General Technical Report PSW-58 (psw_gtr058). Berkeley, California: U.S. Department of Agriculture, Forest Service, Pacific Southwest Forest and Range Experiment Station, June.
http://www.fs.fed.us/psw/publications/documents/psw_gtr058/
- . 2002a. "Native American impacts on fire regimes of the California coastal ranges." *Journal of Biogeography* 29 (3) (March): 303–320. doi:10.1046/j.1365-2699.2002.00676.x.
- . 2002b. "Fire management of California shrubland landscapes." *Environmental Management* 29 (3) (March): 395–408. doi:10.1007/s00267-001-0034-Y.
- . 2004. "Impact of antecedent climate on fire regimes in coastal California." *International Journal of Wildland Fire* 13 (2) (June): 173–182. doi:10.1071/WF03037.
- Keeley, Jon E. 2009. "Fire intensity, fire severity and burn severity: A brief review and suggested usage." *International Journal of Wildland Fire* 18 (1) (February): 116–126. doi:10.1071/WF07049.
- Keeley, Jon E., and Connie J. Fotheringham. 2001. "Historic fire regime in southern California shrublands." *Conservation Biology* 15 (6) (December): 1536–1548. doi:10.1046/j.1523-1739.2001.00097.x.
- Keeley, Jon E., and Philip W. Rundel. 2005. "Fire and the Miocene expansion of C₄ grasslands." *Ecology Letters* 8 (7) (July): 683–690. doi:10.1111/j.1461-0248.2005.00767.x.
- Keeley, Jon E., Greg H. Aplet, Norman L. Christensen, Susan G. Conard, Edward A. Johnson, Philip A. Omi, David L. Peterson, and Thomas W. Swetnam. 2009. *Ecological foundations for fire management in North American forest and shrubland ecosystems*. General Technical Report. Portland, OR: U.S. Dept. of Agriculture, Forest Service, Pacific Northwest Research Station, March.
<http://www.treesearch.fs.fed.us/pubs/32483>
- Keeling, Charles D., Timothy P. Whorf, Martin Wahlen, and Johannes van der Plicht. 1995. "Interannual extremes in the rate of rise of atmospheric carbon dioxide since 1980." *Nature* 375 (6533) (June 22): 666–670. doi:10.1038/375666a0.
- Keeling, Charles D. 1973. "Industrial production of carbon dioxide from fossil fuels and limestone." *Tellus* 25 (2) (April): 174–198. doi:10.1111/j.2153-3490.1973.tb01604.x.
- Keeling, Charles D., Robert B. Bacastow, Arnold E. Bainbridge, Carl A. Ekdahl, Peter R. Guenther, Lee S. Waterman, and John F. S. Chin. 1976. "Atmospheric carbon dioxide variations at Mauna Loa Observatory, Hawaii." *Tellus* 28 (6) (December): 538–551. doi:10.1111/j.2153-3490.1976.tb00701.x.
- Keeling, R. F., S. C. Piper, A. F. Bollenbacher, and J. S. Walker. 2010. Atmospheric carbon dioxide record from Mauna Loa. *CDIAC: Trends - CO₂ - SIO Air Sampling Network*. <http://cdiac.ornl.gov/trends/co2/sio-mlo.html>
- Keenlyside, Noel S., and Jin Ba. 2010. "Prospects for decadal climate prediction." *Wiley Interdisciplinary Reviews: Climate Change* 1 (5) (October): 627–635. doi:10.1002/wcc.69.
- Kempes, Christopher P., Geoffrey B. West, Kelly Crowell, and Michelle Girvan. 2011. "Predicting maximum tree heights and other traits from allometric scaling and resource limitations." *PLoS ONE* 6 (6) (June): e20551 (10 p.). doi:10.1371/journal.pone.0020551.

Kendall, Brian, Christopher T. Reinhard, Timothy W. Lyons, Alan J. Kaufman, Simon W. Poulton, and Ariel D. Anbar. 2010. "Pervasive oxygenation along late Archaean ocean margins." *Nature Geoscience* 3 (9) (September): 647-652. doi:10.1038/ngeo942.

Kennedy, Patricia L., and Joseph B. Fontaine. 2009. *Synthesis of knowledge on the effects of fire and fire surrogates on wildlife in U.S. dry forests*. Special Report. Corvallis, OR: Oregon State University, Agricultural Experiment Station, September. <http://ir.library.oregonstate.edu/xmlui/handle/1957/12625> <http://ir.library.oregonstate.edu/jspui/bitstream/1957/12625/1/SR1096.pdf>

Kerr, Richard A. 2010. "El Niño lends more confidence to strong global warming." *Science* 330 (6010) (December 10): 1465-1465. doi:10.1126/science.330.6010.1465.

Key, Carl H. 2006. "Ecological and sampling constraints on defining landscape fire severity." *Fire Ecology* 2 (2) (December 1): 34-59. doi:10.4996/fireecology.0202034.

Keyser, E. M. 1930. "Some 1929 fire-weather comparisons." *Monthly Weather Review* 58 (9) (September): 365-368. doi:10.1175/1520-0493(1930)58<365b:SFC>2.0.CO;2.

Kiehl, Jeffrey. 2011. "Lessons from Earth's past." *Science* 331 (6014) (January 14): 158-159. doi:10.1126/science.1199380.

Kilgore, Bruce M. 1981. Fire in ecosystem distribution and structure: Western forests and scrublands. In *Fire Regimes and Ecosystem Properties Proceedings of the Conference*, 58-89. General Technical Report WO-GTR-26. Washington D.C.: USDA Forest Service, June. <http://digitalcommons.usu.edu/barkbeetles/81/>

Kilgore, Bruce M., and Dan Taylor. 1979. "Fire history of a sequoia-mixed conifer forest." *Ecology* 60 (1) (February): 129–142. doi:10.2307/1936475.

Kipfmüller, Kurt F., and William L. Baker. 2000. "A fire history of a subalpine forest in south-eastern Wyoming, USA." *Journal of Biogeography* 27 (1) (January): 71–85. doi:10.1046/j.1365-2699.2000.00364.x.

Kitzberger, Thomas. 2002. "ENSO as a forewarning tool of regional fire occurrence in northern Patagonia, Argentina." *International Journal of Wildland Fire* 11 (1) (January): 33-39. doi:10.1071/WF01041.

Kitzberger, Thomas, Peter M. Brown, Emily K. Heyerdahl, Thomas W. Swetnam, and Thomas T. Veblen. 2007. "Contingent Pacific–Atlantic Ocean influence on multicentury wildfire synchrony over western North America." *Proceedings of the National Academy of Sciences* 104 (2) (January 9): 543-548. doi:10.1073/pnas.0606078104.

Kitzberger, Thomas, Thomas W. Swetnam, and Thomas T. Veblen. 2001. "Inter-hemispheric synchrony of forest fires and the El Niño-Southern Oscillation." *Global Ecology and Biogeography* 10 (3) (May): 315–326. doi:10.1046/j.1466-822X.2001.00234.x.

Klasner, Frederick L., and Daniel B. Fagre. 2002. "A half century of change in alpine treeline patterns at Glacier National Park, Montana, U.S.A." *Arctic, Antarctic, and Alpine Research* 34 (1) (February): 49-56. doi:10.2307/1552508.

Kleeman, Richard, and Andrew M. Moore. 1999. "A new method for determining the reliability of dynamical ENSO predictions." *Monthly Weather Review* 127 (5) (May): 694-705. doi:10.1175/1520-0493(1999)127<0694:ANMFDT>2.0.CO;2.

Kloster, Silvia, Natalie M. Mahowald, James T. Randerson, Peter E. Thornton, Forrest M. Hoffman, Samuel Levis, Peter J. Lawrence, Johannes J. Feddema, Keith W. Oleson, and David M. Lawrence. 2010. "Fire dynamics during the 20th century simulated by the Community Land Model." *Biogeosciences* 7 (6) (June): 1877-1902. doi:10.5194/bg-7-1877-2010.

Knapp, Alan K., John M. Blair, John M. Briggs, Scott L. Collins, David C. Hartnett, Loretta C. Johnson, and E. Gene Towne. 1999. "The keystone role of bison in north american tallgrass prairie." *BioScience* 49 (1) (January): 39-50. <http://temperate.lternet.edu/collins/biblio/keystone-role-bison-north-american-tallgrass-prairie>

Knapp, Eric E., Becky L. Estes, and Carl N. Skinner. 2009. *Ecological effects of prescribed fire season: A literature review and synthesis for managers*. General Technical Report. Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station, September. <http://www.treesearch.fs.fed.us/pubs/33628>

Knapp, Paul A. 1998. "Spatio-temporal patterns of large grassland fires in the Intermountain West, USA." *Global Ecology and Biogeography Letters* 7 (4) (July): 259-272.

Knapp, Paul A., and Peter T. Soulé. 2007. "Trends in midlatitude cyclone frequency and occurrence during fire season in the Northern Rockies: 1900–2004." *Geophysical Research Letters* 34 (20) (October): L20707 (5 p.). doi:10.1029/2007GL031216.

Knapp, Paul A., Henri D. Grissino-Mayer, and Peter T. Soulé. 2002. "Climatic regionalization and the spatio-temporal occurrence of extreme single-year drought events (1500–1998) in the interior Pacific Northwest, USA." *Quaternary Research* 58 (3) (November): 226–233. doi:10.1006/qres.2002.2376.

Knohl, Alexander, and Edzo Veldkamp. 2011. "Global change: Indirect feedbacks to rising CO₂." *Nature* 475 (7355) (July 14): 177-178. doi:10.1038/475177a.

Knutti, Reto, Myles R. Allen, Pierre Friedlingstein, Jonathan M. Gregory, Gabriele C. Hegerl, Gerald A. Meehl, Malte Meinshausen, et al. 2008. "A review of uncertainties in global temperature projections over the twenty-first century." *Journal of Climate* 21 (11) (June): 2651-2663. doi:10.1175/2007JCLI2119.1.

Koch, Elers. 1978. *When the mountrains roared: Stories of the 1910 fire*. R1-78-30 ed. Idaho: United States Department of Agriculture, Forest Service, Idaho Panhandle National Forests. http://www.foresthistor.org/ASPNET/Publications/region/1/1910_fires/index.htm

Kolden, Crystal A., and Timothy J. Brown. 2007. Climate in the context of wildland fire use: Windows of opportunity. In Washington, D.C.: The American Meteorological Society and organized by the AMS Committee on Agricultural and Forest Meteorology. <http://www.ametsoc.org/meet/fainst/2007firenortheast.html>

—. 2010. "Beyond wildfire: Perspectives of climate, managed fire and policy in the USA." *International Journal of Wildland Fire* 19 (3) (May): 364-373. doi:10.1071/WF08111.

Kopp, Greg, and Judith L. Lean. 2011. "A new, lower value of total solar irradiance: Evidence and climate significance." *Geophysical Research Letters* 38 (1) (January): L01706 (7 p.). doi:10.1029/2010GL045777.

von Köppen, Wladimir Peter. 1931. *Grundriss der klimakunde*. 2nd edition, 28 illustrations ed. Berlin: Walter de Gruyter. http://shop.meteorologie-buecher.de/catalog/popup_image.php?plID=317

von Köppen, Wladimir Peter, and Rudolf Geiger, eds. 1930. *Handbuch der Klimatologie in Fünf Bänden*. Vol. 2. Berlin: Verlag von Gerbrüder Borntraeger.

http://books.google.com/books?id=ysjaAAAAMAAJ&q=Handbuch+der+Klimatologie+in+F%C3%BCnf+C3%A4nden,+Volume+2&dq=Handbuch+der+Klimatologie+in+F%C3%BCnf+C3%A4nden,+Volume+2&hl=en&ei=7YVYTvbilqWysAL74ZnKDA&sa=X&oi=book_result&ct=result&resnum=3&ved=0CDIQ6AEwAg

Kottek, Markus, Jürgen Grieser, Christoph Beck, Bruno Rudolf, and Franz Rubel. 2006. "World map of the Köppen-Geiger climate classification updated." *Meteorologische Zeitschrift* 15 (3) (June): 259–263. doi:10.1127/0941-2948/2006/0130.

Koven, Charles D., Bruno Ringeval, Pierre Friedlingstein, Philippe Ciais, Patricia Cadule, Dmitry Khvorostyanov, Gerhard Krinner, and Charles Tarnocai. 2011. "Permafrost carbon-climate feedbacks accelerate global warming." *Proceedings of the National Academy of Sciences* 108 (36) (September 6): 14769–14774. doi:10.1073/pnas.1103910108.

Krawchuk, Meg A., Steve G. Cumming, and Mike D. Flannigan. 2009. "Predicted changes in fire weather suggest increases in lightning fire initiation and future area burned in the mixedwood boreal forest." *Climatic Change* 92 (1-2) (January): 83–97. doi:10.1007/s10584-008-9460-7.

Krawchuk, Meg A., Max A. Moritz, Marc-André Parisien, Jeff Van Dorn, and Katharine Hayhoe. 2009. "Global pyrogeography: The current and future distribution of wildfire." *PLoS ONE* 4 (4) (April): e5102 (12 p.). www.plosone.org. doi:10.1371/journal.pone.0005102.

Krawchuk, M.A., and M.A. Moritz. 2011. "Constraints on global fire activity vary across a resource gradient." *Ecology* 92 (1): 121–132.

Kuglitsch, Franz G., Andrea Toreti, Elena Xoplaki, Paul M. Della-Marta, Christos S. Zerefos, Murat Türkeş, and Jürg Luterbacher. 2010. "Heat wave changes in the eastern Mediterranean since 1960." *Geophysical Research Letters* 37 (4) (February): L04802 (5 p.). doi:10.1029/2009GL041841.

Kuhlbusch, Thomas A. J. 1998. "Black carbon and the carbon cycle." *Science* 280 (5371) (June 19): 1903–1904. doi:10.1126/science.280.5371.1903.

Kulakowski, Dominik, and Thomas T. Veblen. 2002. "Influences of fire history and topography on the pattern of a severe wind blowdown in a Colorado subalpine forest." *Journal of Ecology* 90 (5) (October): 806–819. doi:10.1046/j.1365-2745.2002.00722.x.

—. 2006. "The effect of fires on susceptibility of subalpine forests to a 19th century spruce beetle outbreak in western Colorado." *Canadian Journal of Forest Research* 36 (11) (November): 2974–2982. doi:10.1139/x06-182.

Kulakowski, D., T.T. Veblen, and P. Bebi. 2003. "Effects of fire and spruce beetle outbreak legacies on the disturbance regime of a subalpine forest in Colorado." *Journal of Biogeography* 30: 1–12.

Kurz, Werner A., Graham Stinson, Gregory J. Rampley, Caren C. Dymond, and Eric T. Neilson. 2008. "Risk of natural disturbances makes future contribution of Canada's forests to the global carbon cycle highly uncertain." *Proceedings of the National Academy of Sciences* 105 (5) (February 5): 1551-1555. doi:10.1073/pnas.0708133105.

Lacis, Andrew A., Gavin A. Schmidt, David Rind, and Reto A. Ruedy. 2010. "Atmospheric CO₂: Principal control knob governing Earth's temperature." *Science* 330 (6002) (October 15): 356-359. doi:10.1126/science.1190653.

Laepple, Thomas, Martin Werner, and Gerrit Lohmann. 2011. "Synchronicity of Antarctic temperatures and local solar insolation on orbital timescales." *Nature* 471 (7336) (March 3): 91-94. doi:10.1038/nature09825.

Lafon, Charles W. 2010. "Fire in the American south: Vegetation impacts, history, and climatic relations." *Geography Compass* 4 (8) (August): 919-944. doi:10.1111/j.1749-8198.2010.00363.x.

Lafon, Charles W., Jennifer A. Hoss, and Henri D. Grissino-Mayer. 2005. "The contemporary fire regime of the central Appalachian Mountains and its relation to climate." *Physical Geography* 26 (2) (April): 126-146. doi:10.2747/0272-3646.26.2.126.

Lammertsma, Emmy I., Hugo Jan de Boer, Stefan C. Dekker, David L. Dilcher, André F. Lotter, and Friederike Wagner-Cremer. 2011. "Global CO₂ rise leads to reduced maximum stomatal conductance in Florida vegetation." *Proceedings of the National Academy of Sciences* 108 (10) (March 8): 4035-4040. doi:10.1073/pnas.1100371108.

Landres, Peter B., Penelope Morgan, and Frederick J. Swanson. 1999. "Overview of the use of natural variability concepts in managing ecological systems." *Ecological Applications* 9 (4) (November): 1179-1188. doi:10.1890/1051-0761(1999)009[1179:OOTUON]2.0.CO;2.

Lanning, Susan P., Kenneth Kephart, Gregg R. Carlson, Joyce E. Eckhoff, Robert N. Stougaard, David M. Wichman, John M. Martin, and Luther E. Talbert. 2010. "Climatic change and agronomic performance of hard red spring wheat from 1950 to 2007." *Crop Science* 50 (3) (June): 835-841. doi:10.2135/cropsci2009.06.0314.

Larsen, Julius A. 1929. "Fires and forest succession in the Bitterroot Mountains of northern Idaho." *Ecology* 10 (1) (January): 67-76. doi:10.2307/1940513.

Larsen, Julius A., and C. C. Delavan. 1922. "Climate and forest fires in Montana and Northern Idaho, 1909 to 1919." *Monthly Weather Review* 50 (2) (February): 55-68. doi:10.1175/1520-0493(1922)50<55:CAFFIM>2.0.CO;2.

Latif, Mojib, and Tim P. Barnett. 1996. "Decadal climate variability over the North Pacific and North America: Dynamics and predictability." *Journal of Climate* 9 (10) (October): 2407-2423. doi:10.1175/1520-0442(1996)009<2407:DCVOTN>2.0.CO;2.

Latif, Mojib, and Timothy P. Barnett. 1994. "Causes of decadal climate variability over the North Pacific and North America." *Science* 266 (5185) (October 28): 634-637. doi:10.1126/science.266.5185.634.

Lau, William K. M., and Kyu-Myong Kim. 2011. "The 2010 Pakistan flood and Russian heat wave: Teleconnection of hydrometeorologic extremes." *Journal of Hydrometeorology Early Online Releases* (?) (August): 31 p. doi:10.1175/JHM-D-11-016.1.

- Lavorel, Sandra, Mike D. Flannigan, Eric F. Lambin, and Mary C. Scholes. 2007. "Vulnerability of land systems to fire: Interactions among humans, climate, the atmosphere, and ecosystems." *Mitigation and Adaptation Strategies for Global Change* 12 (1) (January): 33-53. doi:10.1007/s11027-006-9046-5.
- Lean, Judith L., and David H. Rind. 2009. "How will Earth's surface temperature change in future decades?" *Geophysical Research Letters* 36 (15) (August): L15708 (5 p.). doi:10.1029/2009GL038932.
- van Lear, David H., and Thomas A. Waldrop. 1989. *History, uses, and effects of fire in the Appalachians*. General Technical Report. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station, April. <http://www.srs.fs.usda.gov/pubs/191>
- Lee, Danny C., Alan A. Ager, Dave E. Calkin, Mark A. Finney, Matthew P. Thompson, Thomas M. Quigley, and Charles W. McHugh. 2011. *A national cohesive wildland fire management strategy*. Cohesive Strategy Reports. Washington, D.C.: Wildland Fire Leadership Council (WFLC), March. Forests and Rangelands. <http://www.forestsandrangelands.gov/strategy/>
- Lee, Tong, and Michael J. McPhaden. 2010. "Increasing intensity of El Niño in the central-equatorial Pacific." *Geophysical Research Letters* 37 (14) (July): L14603 (5 p.). doi:10.1029/2010GL044007.
- Leighton, Mark. 1984. *The El Niño Southern Oscillation event in southeast Asia: Effects of drought and fire in tropical forest in eastern Borneo*. To the World Wildlife Fund. Cambridge, MA: Department of Anthropology, Harvard University. <http://www.worldwildlife.org/home-full.html>
- Leitner, Lawrence A., Christopher P. Dunn, Glenn R. Guntenspergen, Forest Stearns, and David M. Sharpe. 1991. "Effects of site, landscape features, and fire regime on vegetation patterns in presettlement southern Wisconsin." *Landscape Ecology* 5 (4) (July): 203–217. doi:10.1007/BF00141435.
- Lenihan, James M., Raymond Drapek, Dominique Bachelet, and Ronald P. Neilson. 2003. "Climate change effects on vegetation distribution, carbon, and fire in California." *Ecological Applications* 13 (6) (December): 1667–1681. doi:10.1890/025295.
- Lenihan, James M., Christopher Daly, Dominique Bachelet, and Ronald P. Neilson. 1998. "Simulating broad-scale fire severity in a dynamic global vegetation model." *Northwest Science* 72 (Special Issue 1): 91–103.
http://www.vetmed.wsu.edu/org_nws/NWSci%20journal%20articles/1998%20files/1998%20Vol%2072.htm
- Lennon, Brian. 2000. "Text on the weather." *The Iowa Review* 30 (2): 101–113.
- Lertzman, Ken, Joseph Fall, and Brigitte Dorner. 1998. "Three kinds of heterogeneity in fire regimes: At the crossroads of fire history and landscape ecology." *Northwest Science* 72 (Special Issue 1): 4–23.
- Lertzman, Ken, Daniel Gavin, Douglas Hallett, Linda Brubaker, Dana Lepofsky, and Rolf Mathewes. 2002. "Long-term fire regime estimated from soil charcoal in coastal temperate rainforests." *Conservation Ecology* 6 (2) (December): 1-13.
- Lesieur, Daniel, Sylvie Gauthier, and Yves Prairie. 2002. "Fire frequency and vegetation dynamics for the south-central boreal forest of Québec, Canada." *Canadian Journal of Forest Research* 32 (11) (November): 1996–2009. doi:10.1139/x02-113.

- Lessard, Gene. 1998. "An adaptive approach to planning and decision-making." *Landscape and Urban Planning* 40 (1-3) (March): 81-87. doi:10.1016/S0169-2046(97)00100-X.
- Levin, Simon A. 1992. "The problem of pattern and scale in ecology: The Robert H. MacArthur award lecture." *Ecology* 73 (6) (December): 1943–1967. doi:10.2307/1941447.
- Lewis, Simon L., Paulo M. Brando, Oliver L. Phillips, Geertje M. F. van der Heijden, and Daniel Nepstad. 2011. "The 2010 Amazon drought." *Science* 331 (6017) (February 4): 554. doi:10.1126/science.1200807.
- Li, Chao. 2000. "Reconstruction of natural fire regimes through ecological modelling." *Ecological Modelling* 134 (2-3) (October 30): 129–144. doi:10.1016/S0304-3800(00)00290-8.
- Li, Jinbao, Shang-Ping Xie, Edward R. Cook, Gang Huang, Rosanne D'Arrigo, Fei Liu, Jian Ma, and Xiao-Tong Zheng. 2011. "Interdecadal modulation of El Niño amplitude during the past millennium." *Nature Climate Change* 1 (2) (May): 114-118. doi:10.1038/nclimate1086.
- Li, Wenhong, Laifang Li, Rong Fu, Yi Deng, and Hui Wang. 2011. "Changes to the North Atlantic subtropical high and its role in the intensification of summer rainfall variability in the southeastern United States." *Journal of Climate* 24 (5) (March): 1499–1506. doi:10.1175/2010JCLI3829.1.
- Limpasuvan, Varavut, and Dennis L. Hartmann. 2000. "Wave-maintained annular modes of climate variability*." *Journal of Climate* 13 (24) (December): 4414-4429. doi:10.1175/1520-0442(2000)013<4414:WMAMOC>2.0.CO;2.
- Lindenmayer, D. B., R. J. Hobbs, G. E. Likens, C. J. Krebs, and S. C. Banks. 2011. "Newly discovered landscape traps produce regime shifts in wet forests." *Proceedings of the National Academy of Sciences* 108 (August 29): 15887-15891. doi:10.1073/pnas.1110245108.
- Lindzen, Richard S., and Yong-Sang Choi. 2011. "On the observational determination of climate sensitivity and its implications." *Asia-Pacific Journal of Atmospheric Sciences* 47 (4) (August): 377-390. doi:10.1007/s13143-011-0023-x.
- Littell, Jeremy S., Donald McKenzie, David L. Peterson, and Anthony L. Westerling. 2009. "Climate and wildfire area burned in Western U.S. ecoregions, 1916-2003." *Ecological Applications* 19 (4) (June): 1003–1021. doi:10.1890/07-1183.1.
- Littell, Jeremy S., David L. Peterson, Constance I. Millar, and Kathy A. O'Halloran. 2011. "U.S. National Forests adapt to climate change through Science–Management partnerships." *Climatic Change* Published online (May 10). doi:10.1007/s10584-011-0066-0.
<http://www.springerlink.com/content/yp28647842x040p6/>
- Lockwood, Michael, R. Giles Harrison, Matt J. Owens, Luke Barnard, Tim Woollings, and Friedhelm Steinhilber. 2011. "The solar influence on the probability of relatively cold UK winters in the future." *Environmental Research Letters* 6 (3) (September): 034004 (11 p.). doi:10.1088/1748-9326/6/3/034004.
- Loehman, Rachel, and Greer Anderson. 2009. *Understanding the science of climate change: Talking points - Impacts to western mountains and forests*. Natural Resource Report. Fort Collins, CO: U.S. Department of the Interior, National Park Service, Natural Resources Program Center, February.
<http://www.treesearch.fs.fed.us/pubs/33773>
http://www.fs.fed.us/rm/pubs_other/rmrs_2009_loehman_r001.pdf

Loehman, Rachel A., Corrow, Alissa, and Robert E. Keane. 2011. Modeling climate changes and wildfire interactions: Effects on whitebark pine (*Pinus albicaulis*) and implications for restoration, Glacier National Park, Montana, USA. In *The Future of High-Elevation, Five-Needle White Pines in Western North America: Proceedings of the High Five Symposium*, 176-189. USDA Forest Service Proceedings RMRS-P-63. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, June. <http://www.treesearch.fs.fed.us/pubs/38218>

Lombardo, KJ, TW Swetnam, CH Baisan, and MI Borchert. 2009. "Using bigcone Douglas-fir fire scars and tree rings to reconstruct interior chaparral fire history." *Fire Ecology* 5 (3): 35–56.

Long, Colin J., and Cathy Whitlock. 2002. "Fire and vegetation history from the coastal rain forest of the western Oregon Coast Range." *Quaternary Research* 58 (3) (November): 215-225. doi:10.1006/qres.2002.2378.

Long, Colin J., Cathy Whitlock, Patrick J. Bartlein, and Sarah H. Millspaugh. 1998. "A 9000-year fire history from the Oregon Coast Range, based on a high-resolution charcoal study." *Canadian Journal of Forest Research* 28 (5) (May): 774–787. doi:10.1139/cjfr-28-5-774.

Lorenz, Edward N. 1967. *The nature and theory of the general circulation of the atmosphere*. 1st ed. Issue 218 of World Meteorological Organization publications. Geneva, Switzerland: World Meteorological Organization. <http://eapsweb.mit.edu/research/Lorenz/publications.htm>

—. 1969. "Atmospheric predictability as revealed by naturally occurring analogues." *Journal of the Atmospheric Sciences* 26 (4) (July): 636-646. doi:10.1175/1520-0469(1969)26<636:APARBN>2.0.CO;2.

—. 1972. "Barotropic instability of Rossby wave motion." *Journal of Atmospheric Sciences* 29 (2) (March): 258–265. doi:10.1175/1520-0469(1972)029<0258:BIORWM>2.0.CO;2.

—. 2006. "Reflections on the conception, birth, and childhood of numerical weather prediction." *Annual Review of Earth and Planetary Sciences* 34 (May): 37-45. doi:10.1146/annurev.earth.34.083105.102317.

Di Lorenzo, Emanuele, Kim M. Cobb, Jason C. Furtado, Niklas Schneider, Bruce T. Anderson, Annalisa Bracco, Michael A. Alexander, and Daniel J. Vimont. 2010. "Central Pacific El Niño and decadal climate change in the North Pacific Ocean." *Nature Geoscience* 3 (11) (November): 762-765. doi:10.1038/ngeo984.

Lorimer, Craig G. 1977. "The presettlement forest and natural disturbance cycle of northeastern Maine." *Ecology* 58 (1) (January): 139–148. doi:10.2307/1935115.

Lorimer, Craig G., and William R. Gough. 1988. "Frequency of drought and severe fire weather in north-eastern Wisconsin." *Journal of Environmental Management* 26 (3): 203–219.

Lowman, Margaret, Charlene D'Avanzo, and Carol Brewer. 2009. "A national ecological network for research and education." *Science* 323 (5918) (February 27): 1172-1173. doi:10.1126/science.1166945.

Lugo, Ariel E., Sandra L. Brown, Rusty Dodson, Thomas S. Smith, and Herman H. Shugart. 1999. "Special paper: The Holdridge life zones of the conterminous United States in relation to ecosystem mapping." *Journal of Biogeography* 26 (5) (September): 1025–1038.

Lutz, Harold J. 1959. *Aboriginal man and white men as historical causes of fires in the boreal forest, with particular reference to Alaska*. Yale School of Forestry Bulletin. New Haven, CT: Yale University.
<http://ir.library.oregonstate.edu/xmlui/handle/1957/11281>

Lutz, James A., Jan W. van Wagendonk, Andrea E. Thode, Jay D. Miller, and Jerry F. Franklin. 2009. "Climate, lightning ignitions, and fire severity in Yosemite National Park, California, USA." *International Journal of Wildland Fire* 18 (7) (October): 765–774. doi:10.1071/WF08117.

Lynch, Cary, and Amy Hessl. 2010. "Climatic controls on historical wildfires in West Virginia, 1939–2008." *Physical Geography* 31 (3) (June): 254–269. doi:10.2747/0272-3646.31.3.254.

Lynch, Elizabeth A., Randy Calcote, and Sara C. Hotchkiss. 2006. "Late-Holocene vegetation and fire history from Ferry Lake, northwestern Wisconsin, USA." *The Holocene* 16 (4) (May): 495–504. doi:10.1191/0959683606hl945rp.

Lynch, Jason A., James S. Clark, Nancy H. F. French, Mary E. Edwards, and Bruce P. Finney. 2002. "Geographic and temporal variations in fire history in boreal ecosystems of Alaska." *Journal of Geophysical Research* 108 (D1) (December): 8152 (17 p.). doi:10.1029/2001JD000332.

Lynch, Jason A., Jeremy L. Hollis, and Feng Sheng Hu. 2004. "Climatic and landscape controls of the boreal forest fire regime: Holocene records from Alaska." *Journal of Ecology* 92 (3) (June): 477–489. doi:10.1111/j.0022-0477.2004.00879.x.

MacCleery, Douglas W. 1992. *American forests: A history of resiliency and recovery*. 1st ed. Forest History Society's Issues Series. Durham N.C.: U.S. Dept. of Agriculture Forest Service in cooperation with Forest History Society, October. <http://www.foresthISTORY.org/publications/Issues/amforests.html>

Macias Fauria, Marc, and Edward A. Johnson. 2006. "Large-scale climatic patterns control large lightning fire occurrence in Canada and Alaska forest regions." *Journal of Geophysical Research* 111 (4) (November): G04008 (17 p.). doi:10.1029/2006JG000181.

—. 2008. "Climate and wildfires in the North American boreal forest." *Philosophical Transactions of the Royal Society B* 363 (1501) (July 12): 2315–2327. doi:10.1098/rstb.2007.2202.

Macias Fauria, Marc, Sean T. Michaletz, and Edward A. Johnson. 2011. "Predicting climate change effects on wildfires requires linking processes across scales." *Wiley Interdisciplinary Reviews: Climate Change* 2 (1) (February): 99–112. doi:10.1002/wcc.92.

Mack, Michelle C., M. Syndonia Bret-Harte, Teresa N. Hollingsworth, Randi R. Jandt, Edward A. G. Schuur, Gaius R. Shaver, and David L. Verbyla. 2011. "Carbon loss from an unprecedented Arctic tundra wildfire." *Nature* 475 (7357) (July 28): 489–492. doi:10.1038/nature10283.

Madany, Michael H., and Niel E. West. 1983. "Livestock grazing-fire regime interactions within montane forests of Zion National Park, Utah." *Ecology* 64 (4) (August): 661–667. doi:10.2307/1937186.

Madouï, Amar, Alain Leduc, Sylvie Gauthier, and Yves Bergeron. 2010. "Spatial pattern analyses of post-fire residual stands in the black spruce boreal forest of western Quebec." *International Journal of Wildland Fire* 19 (8) (December): 1110–1126. doi:10.1071/WF10049.

Malamud, Bruce D., James D. A. Millington, and George L. W. Perry. 2005. "Characterizing wildfire regimes in the United States." *Proceedings of the National Academy of Sciences* 102 (13) (March 29): 4694-4699. doi:10.1073/pnas.0500880102.

Malanson, George P., and Walter E. Westman. 1991. "Modeling interactive effects of climate change, air pollution, and fire on a California shrubland." *Climatic Change* 18 (4) (June): 363–376. doi:10.1007/BF00142967.

Malevsky-Malevich, Sergey Petrovich, Elena K. Molkentin, Ekaterina D. Nadyozhina, and Oksana B. Shklyarevich. 2008. "An assessment of potential change in wildfire activity in the Russian boreal forest zone induced by climate warming during the twenty-first century." *Climatic Change* 86 (3-4) (February): 463-474. doi:10.1007/s10584-007-9295-7.

Malmsheimer, Robert W., Patrick Heffernan, Steve Brink, Douglas Crandall, Fred Deneke, Christopher Galik, Edmund Gee, et al. 2008. "Forest management solutions for mitigating climate change in the United States." *Journal of Forestry* 106 (3) (May): 115–173 + 2 p.

<http://ddr.nal.usda.gov/handle/10113/21386>

Mann, Michael E. 2007. "Climate over the past two millennia." *Annual Review of Earth and Planetary Sciences* 35 (May): 111-136. doi:10.1146/annurev.earth.35.031306.140042.

Mann, Michael E., Raymond S. Bradley, and Malcolm K. Hughes. 1999. "Northern Hemisphere temperatures during the past millennium: Inferences, uncertainties, and limitations." *Geophysical Research Letters* 26 (6) (March): 759-762. doi:10.1029/1999GL900070.

Mann, Michael E., Zhihua Zhang, Scott Rutherford, Raymond S. Bradley, Malcolm K. Hughes, Drew Shindell, Caspar Ammann, Greg Faluvegi, and Fenbiao Ni. 2009. "Global signatures and dynamical origins of the Little Ice Age and Medieval Climate Anomaly." *Science* 326 (5957) (November 27): 1256-1260. doi:10.1126/science.1177303.

Mann, Michael E., Raymond S. Bradley, and Malcolm K. Hughes. 1998. "Global-scale temperature patterns and climate forcing over the past six centuries." *Nature* 392 (6678) (April 23): 779–787. doi:10.1038/33859.

Mann, Michael E., Zhihua Zhang, Malcolm K. Hughes, Raymond S. Bradley, Sonya K. Miller, Scott Rutherford, and Fenbiao Nicolussi. 2008. "Proxy-based reconstructions of hemispheric and global surface temperature variations over the past two millennia." *Proceedings of the National Academy of Sciences* 105 (36) (September 9): 13252-13257. doi:10.1073/pnas.0805721105.

Mansuy, Nicolas, Sylvie Gauthier, André Robitaille, and Yves Bergeron. 2010. "The effects of surficial deposit-drainage combinations on spatial variations of fire cycles in the boreal forest of eastern Canada." *International Journal of Wildland Fire* 19 (8) (December): 1083–1098. doi:10.1071/WF09144.

van Mantgem, Philip E., Nathan L. Stephenson, John C. Byrne, Lori D. Daniels, Jerry F. Franklin, Peter Z. Fulé, Mark E. Harmon, et al. 2009. "Widespread increase of tree mortality rates in the western United States." *Science* 323 (5913) (January 23): 521-524. doi:10.1126/science.1165000.

Margolis, Ellis Q., and Jeff Balmat. 2009. "Fire history and fire-climate relationships along a fire regime gradient in the Santa Fe Municipal Watershed, NM, USA." *Forest Ecology and Management* 258 (11) (November 10): 2416-2430. doi:10.1016/j.foreco.2009.08.019.

Marlon, Jennifer R. 2009. The geography of fire: A paleo perspective. A dissertation presented to the Department of Geography and the Graduate School of the University of Oregon in partial fulfillment of the requirements for the degree of Doctor of Philosophy, Eugene, OR: University of Oregon, September. <http://hdl.handle.net/1794/10334>

Marlon, Jennifer R., Patrick J. Bartlein, and Cathy Whitlock. 2006. "Fire-fuel-climate linkages in the northwestern USA during the Holocene." *The Holocene* 16 (8) (December): 1059-1071. doi:10.1177/0959683606069396.

Marlon, Jennifer R., Patrick J. Bartlein, Christopher Carcaillet, Daniel G. Gavin, Sandy P. Harrison, Philip E. Higuera, Fortunat Joos, Mitchell J. Power, and I. Colin Prentice. 2008. "Climate and human influences on global biomass burning over the past two millennia." *Nature Geoscience* 1 (10) (October): 697-702. doi:10.1038/ngeo313.

Marlon, Jennifer R., Patrick J. Bartlein, Megan K. Walsh, Sandy P. Harrison, Kendrick J. Brown, Mary E. Edwards, Philip E. Higuera, et al. 2009. "Wildfire responses to abrupt climate change in North America." *Proceedings of the National Academy of Sciences* 106 (8) (February 24): 2519–2524. doi:10.1073/pnas.0808212106.

Martínez-Garcia, Alfredo, Antoni Rosell-Melé, Samuel L. Jaccard, Walter Geibert, Daniel M. Sigman, and Gerald H. Haug. 2011. "Southern Ocean dust–climate coupling over the past four million years." *Nature* 476 (7360) (August 18): 312-315. doi:10.1038/nature10310.

Marynowski, Leszek, and Bernd R. T. Simoneit. 2009. "Widespread Upper Triassic to Lower Jurassic wildfire records from Poland: Evidence from charcoal and pyrolytic polycyclic aromatic hydrocarbons." *PALAIOS* 24 (12) (December): 785-798. doi:10.2110/palo.2009.p09-044r.

Matsueda, Mio. 2011. "Predictability of Euro-Russian blocking in summer of 2010." *Geophysical Research Letters* 38 (6) (March): L06801 (6 p.). doi:10.1029/2010GL046557.

Maxwell, Justin T., and Peter T. Soulé. 2009. "United States drought of 2007: Historical perspectives." *Climate Research* 38 (2) (February): 95-104. doi:10.3354/cr00772.

McCarthy, Brian C., Christine J. Small, and Darrin L. Rubino. 2001. "Composition, structure and dynamics of Dysart Woods, an old-growth mixed mesophytic forest of southeastern Ohio." *Forest Ecology and Management* 140 (2-3) (January 15): 193–213. doi:10.1016/S0378-1127(00)00280-2.

McCarthy, Edwin F. 1923. "Forest fire weather in the southern Appalachians." *Monthly Weather Review* 51 (4) (April): 182-185. doi:10.1175/1520-0493(1923)51<182:FFWITS>2.0.CO;2.

McCarthy, Edwin F. 1927. "Weather and forest inflammability in the Southern Appalachians." *Monthly Weather Review* 55 (3) (March): 119-122. doi:10.1175/1520-0493(1927)55<119:WAFIIT>2.0.CO;2.

McClain, William E., Terry L. Esker, Bob R. Edgin, Greg Spyreas, and John E. Ebinger. 2010. "Fire history of a post oak (*Quercus stellata* Wang.) woodland in Hamilton County, Illinois." *Castanea* 75 (4) (December): 461-474. doi:10.2179/09-007.1.

McCoy, V. M., and Christopher R. Burn. 2005. "Potential alteration by climate change of the forest-fire regime in the boreal forest of central Yukon Territory." *Arctic* 58 (3) (September): 276–285.

- McCutchan, Morris H. 1978. "A model for predicting synoptic weather types based on model output statistics." *Journal of Applied Meteorology* 17 (10) (October): 1466-1475. doi:10.1175/1520-0450(1978)017<1466:AMFPSW>2.0.CO;2.
- McCutchan, Morris H., and Mark J. Schroeder. 1973. "Classification of meteorological patterns in southern California by discriminant analysis." *Journal of Applied Meteorology* 12 (4) (June): 571-577.
- McKenzie, Donald, Ze'ev Gedalof, David L. Peterson, and Philip Mote. 2004. "Climatic change, wildfire, and conservation." *Conservation Biology* 18 (4) (August): 890–902. doi:10.1111/j.1523-1739.2004.00492.x.
- McKenzie, Donald, Carol S. Miller, and Donald A. Falk, eds. 2011. *The landscape ecology of fire*. 1st ed. Vol. 213. Ecological Studies. New York, NY: Springer Verlag.
<http://www.springer.com/life+sciences/ecology/book/978-94-007-0300-1>
- McKenzie, Donald, David L. Peterson, and James K. Agee. 2000. "Fire frequency in the interior Columbia River basin: Building regional models from fire history data." *Ecological Applications* 10 (5) (October): 1497–1516. doi:10.1890/1051-0761(2000)010[1497:FFITIC]2.0.CO;2.
- McPhaden, Michael J. 1999. "Genesis and Evolution of the 1997-98 El Niño." *Science* 283 (5404) (February 12): 950-954. doi:10.1126/science.283.5404.950.
- McWethy, David B., Cathy Whitlock, Janet M. Wilmshurst, Matt S. McGlone, Mairie Fromont, Xun Li, Ann Dieffenbacher-Krall, William O. Hobbs, Sherilyn C. Fritz, and Edward R. Cook. 2010. "Rapid landscape transformation in South Island, New Zealand, following initial Polynesian settlement." *Proceedings of the National Academy of Sciences* 107 (50) (December 14): 21343-21348. doi:10.1073/pnas.1011801107.
- Medvigy, David, Steven C. Wofsy, J. William Munger, and Paul R. Moorcroft. 2010. "Responses of terrestrial ecosystems and carbon budgets to current and future environmental variability." *Proceedings of the National Academy of Sciences* 107 (18) (May 4): 8275-8280. doi:10.1073/pnas.0912032107.
- Meehl, Gerald A., and Claudia Tebaldi. 2004. "More intense, more frequent, and longer lasting heat waves in the 21st century." *Science* 305 (5686) (August 13): 994-997. doi:10.1126/science.1098704.
- Meehl, Gerald A., Curt Covey, Thomas Delworth, Mojib Latif, Bryant McAvaney, John F. B. Mitchell, Ronald J. Stouffer, and Karl E. Taylor. 2007. "The WCRP CMIP3 multimodel dataset: A new era in climate change research." *Bulletin of the American Meteorological Society* 88 (9) (September): 1383–1394. doi:10.1175/BAMS-88-9-1383.
- Meehl, Gerald A., Lisa Goddard, James Murphy, Ronald J. Stouffer, George Boer, Gokhan Danabasoglu, Keith Dixon, et al. 2009. "Decadal prediction: Can it be skillful?" *Bulletin of the American Meteorological Society* 90 (10) (October): 1467-1485. doi:10.1175/2009BAMS2778.1.
- Meehl, Gerald A., Thomas F. Stocker, William D. Collins, Pierre Friedlingstein, Amadou T. Gaye, Jonathan M. Gregory, Akio Kitoh, et al. 2007. "Global climate projections: Climate Change 2007: The physical science basis (Chapter 10) (the fourth assessment report)." *Cambridge University Press, New York*: 747–845.
http://www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_wg1_report_the_physical_science_basis.htm

Meinshausen, Malte, Nicolai Meinshausen, William Hare, Sarah C. B. Raper, Katja Frieler, Reto Knutti, David J. Frame, and Myles R. Allen. 2009. "Greenhouse-gas emission targets for limiting global warming to 2 °C." *Nature* 458 (7242) (April 30): 1158-1162. doi:10.1038/nature08017.

Melillo, Jerry M. 1999. "Warm, warm on the range." *Science* 283 (5399) (January 8): 183-184. doi:10.1126/science.283.5399.183.

Melillo, Jerry M., Terry V. Callaghan, F. Ian Woodward, Enéas Salati, and Suresh K. Sinha. 1990. Effects on ecosystems (Chapter 10) (Climate Change: The IPCC scientific assessment 1990). In *Climate Change: The IPCC Scientific Assessment (1990)*, 283-310. 1st ed. Cambridge, New York and Melbourne: Cambridge University Press. http://lamar.colostate.edu/~mryan/Publications/Melillo_et_al_1990_IPCC1_WG1.PDF

Menges, Eric S, and Christine V Hawkes. 1998. "Interactive effects of fire and microhabitat on plants of Florida scrub." *Ecological Applications* 8 (4) (November): 935–946. doi:10.1890/1051-0761(1998)008[0935:IEOFAM]2.0.CO;2.

Mensing, Scott A., Joel Michaelsen, and Roger Byrne. 1999. "A 560-year record of Santa Ana fires reconstructed from charcoal deposited in the Santa Barbara Basin, California." *Quaternary Research* 51 (3) (May): 295–305. doi:10.1006/qres.1999.2035.

Mensing, Scott, Stephanie Livingston, and Pat Barker. 2006. "Long-term fire history in Great Basin sagebrush reconstructed from macroscopic charcoal in spring sediments, Newark Valley, Nevada." *Western North American Naturalist* 66 (1) (January): 64-77.
<https://ojs.lib.byu.edu/wnan/index.php/wnan/article/view/1475> doi:10.3398/1527-0904(2006)66[64:LFHIGB]2.0.CO;2.

Metsaranta, Juha M. 2010. "Potentially limited detectability of short-term changes in boreal fire regimes: A simulation study." *International Journal of Wildland Fire* 19 (8) (December): 1140–1146. doi:10.1071/WF10037.

Meyer, Grant A., and Jennifer L. Pierce. 2003. "Climatic controls on fire-induced sediment pulses in Yellowstone National Park and central Idaho: A long-term perspective." *Forest Ecology and Management* 178 (1-2) (June): 89-104. doi:10.1016/S0378-1127(03)00055-0.

Meyn, Andrea, Sebastian Schmidlein, Stephen W. Taylor, Martin P. Girardin, Kirsten Thonicke, and Wolfgang Cramer. 2010. "Spatial variation of trends in wildfire and summer drought in British Columbia, Canada, 1920–2000." *International Journal of Wildland Fire* 19 (3) (May): 272-283. doi:10.1071/WF09055.

Meyn, Andrea, Peter S. White, Constanze Buhk, and Anke Jentsch. 2007. "Environmental drivers of large, infrequent wildfires: The emerging conceptual model." *Progress in Physical Geography* 31 (3) (June): 287 -312. doi:10.1177/0309133307079365.

Miao, Xiaodong, Joseph A. Mason, James B. Swinehart, David B. Loope, Paul R. Hanson, Ronald J. Goble, and Xiaodong Liu. 2007. "A 10,000 year record of dune activity, dust storms, and severe drought in the central Great Plains." *Geology* 35 (2) (February): 119-122. doi:10.1130/G23133A.1.

Millar, Constance I., and Wallace B. Woolfenden. 1999. Sierra Nevada forests: Where did they come from? Where are they going? What does it mean? In *Transactions of the 64th North American Wildlife and Natural Resource Conference*, 206-236. Washington, D.C.: Wildlife Management Institute, August. <http://www.treesearch.fs.fed.us/pubs/24289>

Millar, Constance I., and Wallace B. Woolfenden. 1999. "The role of climate change in interpreting historical variability." *Ecological Applications* 9 (4) (November): 1207-1216. doi:10.1890/1051-0761(1999)009[1207:TROCCI]2.0.CO;2.

Millar, Constance I., Nathan L. Stephenson, and Scott L. Stephens. 2007. "Climate change and forests of the future: Managing in the face of uncertainty." *Ecological Applications* 17 (8) (December): 2145-2151. doi:10.1890/06-1715.1.

Millennium Ecosystem Assessment. 2005. *Ecosystems and human well-being: Our human planet (Summary for decision-makers)*. 1st ed. Vol. 5. 5 vols. Millennium Ecosystem Assessment Series. Washington, D.C.: Island Press, December.

http://islandpress.org/bookstore/details21e3.html?prod_id=458

Miller, Norman L., and Nicole J. Schlegel. 2006. "Climate change projected fire weather sensitivity: California Santa Ana wind occurrence." *Geophysical Research Letters* 33 (15) (August): L15711 (5 p.). doi:10.1029/2006GL025808.

Miller, Richard F., and Jeffrey A. Rose. 1999. "Fire history and western juniper encroachment in sagebrush steppe." *Journal of Range Management* 52 (6) (November): 550-559.

Miller, Richard F., and Peter E. Wigand. 1994. "Holocene changes in semiarid pinyon-juniper woodlands: Response to climate, fire, and human activities in the US Great Basin." *BioScience* 44 (7) (August): 465-474. doi:10.2307/1312298.

Miller, R.F., and R.J. Tausch. 2000. The role of fire in pinyon and juniper woodlands: a descriptive analysis. In *Proceedings of the invasive species workshop: the role of fire in the control and spread of invasive species. Fire Conference*, 15-30.

Millington, James D. A., George L. W. Perry, and Bruce D. Malamud. 2006. "Models, data and mechanisms: Quantifying wildfire regimes." *Geological Society, London, Special Publications* 261 (9): 155-167. doi:10.1144/GSL.SP.2006.261.01.12.

Millspaugh, Sarah H., Cathy Whitlock, and Patrick J. Bartlein. 2000. "Variations in fire frequency and climate over the past 17 000 yr in central Yellowstone National Park." *Geology* 28 (3) (March): 211-214. doi:10.1130/0091-7613(2000)28<211:VIFFAC>2.0.CO;2.

Min, Seung-Ki, Xuebin Zhang, Francis W. Zwiers, and Gabriele C. Hegerl. 2011. "Human contribution to more-intense precipitation extremes." *Nature* 470 (7334) (February 17): 378-381. doi:10.1038/nature09763.

Minckley, Thomas A., Cathy Whitlock, and Patrick J. Bartlein. 2007. "Vegetation, fire, and climate history of the northwestern Great Basin during the last 14,000 years." *Quaternary Science Reviews* 26 (17-18) (September): 2167-2184. doi:10.1016/j.quascirev.2007.04.009.

Mitchell, Timothy D. 2003. "Pattern scaling: An examination of the accuracy of the technique for describing future climates." *Climatic Change* 60 (3) (October): 217-242. doi:10.1023/A:1026035305597.

Mladenoff, David J., and William L. Baker, eds. 1999. *Spatial modeling of forest landscape change: Approaches and applications*. illustrated. Cambridge, United Kingdom: Cambridge University Press.
http://landscape.forest.wisc.edu/spatmod_chaps.asp

Mohr, Jerry A., Cathy Whitlock, and Carl N. Skinner. 2000. "Postglacial vegetation and fire history, eastern Klamath Mountains, California, USA." *The Holocene* 10 (5) (July): 587–601. doi:10.1191/095968300675837671.

Moir, W. H. 1982. "A fire history of the high Chisos, Big Bend National Park, Texas." *The Southwestern Naturalist* 27 (1) (February 19): 87–98.

Monserud, Robert A., and Rik Leemans. 1992. "Comparing global vegetation maps with the Kappa statistic." *Ecological Modelling* 62 (4) (August): 275-293. doi:10.1016/0304-3800(92)90003-W.

Montzka, Stephen A., Edward J. Dlugokencky, and James H. Butler. 2011. "Non-CO₂ greenhouse gases and climate change." *Nature* 476 (7358) (August 4): 43-50. doi:10.1038/nature10322.

Montzka, Stephen A., Maarten Krol, Edward Dlugokencky, Bradley Hall, Patrick Jockel, and Jos Lelieveld. 2011. "Small interannual variability of global atmospheric hydroxyl." *Science* 331 (6013) (January 7): 67-69. doi:10.1126/science.1197640.

Moody, Tadashi J., Jo Ann Fites-Kaufman, and Scott L. Stephens. 2006. "Fire history and climate influences from forests in the Northern Sierra Nevada, USA." *Fire Ecology* 2 (1) (April): 115-142. doi:10.4996/fireecology.0201115.

Moorcroft, Paul R. 2003. "Recent advances in ecosystem-atmosphere interactions: An ecological perspective." *Proceedings of the Royal Society B: Biological Sciences* 270 (1521) (June 22): 1215-1227. doi:10.1098/rspb.2002.2251.

—. 2006. "How close are we to a predictive science of the biosphere?" *Trends in Ecology & Evolution* 21 (7) (July): 400-407. doi:10.1016/j.tree.2006.04.009.

Moore, Conrad Taylor. 1972. Man and fire in the central North American grassland, 1535-1890: A documentary historical geography. Ph.D. Dissertation, Los Angeles, CA.: University of California, Los Angeles.

<http://proquest.umi.com/pqdweb?did=759633331&sid=2&Fmt=1&clientId=31810&RQT=309&VName=PQD>

Morgan, Jack A., Daniel R. LeCain, Elise Pendall, Dana M. Blumenthal, Bruce A. Kimball, Yolima Carrillo, David G. Williams, Jana Heisler-White, Feike A. Dijkstra, and Mark West. 2011. "C₄ grasses prosper as carbon dioxide eliminates desiccation in warmed semi-arid grassland." *Nature* 476 (7359) (August 11): 202–205. doi:10.1038/nature10274.

Morgan, M. Granger, and Hadi Dowlatabadi. 1996. "Learning from integrated assessment of climate change." *Climatic Change* 34 (3-4) (November): 337-368. doi:10.1007/BF00139297.

Morgan, Penelope, Stephen C. Bunting, Anne E. Black, Troy Merrill, and Steven Barrett. 1996. *Fire regimes in the interior Columbia River basin: Past and present*. Missoula, MT.: USDA Forest Service Intermountain Fire Sciences Laboratory, Rocky Mountain Research Station, Missoula, April. The Archive of the Interior Columbia Basin Ecosystem Management Project (ICBEMP). <http://www.icbemp.gov/>. www.icbemp.gov/science/morgan.pdf

Morgan, Penelope, Colin C. Hardy, Thomas W. Swetnam, Matthew G. Rollins, and Donald G. Long. 2001. "Mapping fire regimes across time and space: Understanding coarse and fine-scale fire patterns." *International Journal of Wildland Fire* 10 (4) (January): 329-342. doi:10.1071/WF01032.

Morgan, Penelope, Emily K. Heyerdahl, and Carly E. Gibson. 2008. "Multi-season climate synchronized forest fires throughout the 20th century, northern Rockies, USA." *Ecology* 89 (3) (March): 717–728. doi:10.1890/06-2049.1.

Moritz, Max A. 1997. "Analyzing extreme disturbance events: Fire in Los Padres National Forest." *Ecological Applications* 7 (4) (November): 1252–1262. doi:10.1890/1051-0761(1997)007[1252:AEDEFI]2.0.CO;2.

—. 2005. "Wildfires, complexity, and highly optimized tolerance." *Proceedings of the National Academy of Sciences* 102 (December 13): 17912-17917. doi:10.1073/pnas.0508985102.

Moritz, Max A., and Meg A. Krawchuk. 2008. Global pyrogeography: Macro-scaled models of fire-climate relationships for understanding current and future conditions. In *Geophysical Research Abstracts*, 10:2 p. EGU General Assembly Geophysical Research Abstracts 10: EGU2008-A-11511.
<http://nature.berkeley.edu/moritzlab/publications.html>

Moritz, Max A., and Scott L. Stephens. 2008. "Fire and sustainability: Considerations for California's altered future climate." *Climatic Change* 87 (Supplement 1) (March): 265-271. doi:10.1007/s10584-007-9361-1.

Moritz, Max A., Meg A. Krawchuk, and Marc-André Parisien. 2010. "Pyrogeography: Understanding the ecological niche of fire." *PAGES Newsletter* 18 (2) (August): 83-85. PAGES.

Moritz, Max A., Tadashi J. Moody, Meg A. Krawchuk, Mimi Hughes, and Alex Hall. 2010. "Spatial variation in extreme winds predicts large wildfire locations in chaparral ecosystems." *Geophysical Research Letters* 37 (4) (February): L04801 (5 p.). doi:10.1029/2009GL041735.

Morrison, Peter H., and Frederick J. Swanson. 1990. *Fire history and pattern in a Cascade Range landscape*. General Technical Report. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, May. <http://www.treesearch.fs.fed.us/pubs/5627>

Moser, Susanne C., and Julia A. Ekstrom. 2010. "A framework to diagnose barriers to climate change adaptation." *Proceedings of the National Academy of Sciences* 107 (51) (December 21): 22026-22031. doi:10.1073/pnas.1007887107.

Moss, Richard H., Jae A. Edmonds, Kathy A. Hibbard, Martin R. Manning, Steven K. Rose, Detlef P. van Vuuren, Timothy R. Carter, et al. 2010. "The next generation of scenarios for climate change research and assessment." *Nature* 463 (7282) (February 11): 747-756. doi:10.1038/nature08823.

Mote, Philip W., and Eric P. Salathé Jr. 2010. "Future climate in the Pacific Northwest." *Climatic Change* 102 (1-2) (September): 29-50. doi:10.1007/s10584-010-9848-z.

Mote, Thomas L., and Emily R. Kutney. 2011. "Regions of autumn Eurasian snow cover and associations with North American winter temperatures." *International Journal of Climatology* Article first published online (May 17): 14 p. doi:10.1002/joc.2341.

Motzkin, Glenn, William A. Patterson III, and David R. Foster. 1999. "A historical perspective on pitch pine-scrub oak communities in the Connecticut Valley of Massachusetts." *Ecosystems* 2 (3) (June): 255–273. doi:10.1007/s100219900073.

Mouillot, Florent, and Christopher B. Field. 2005. "Fire history and the global carbon budget: A 1 degree x 1 degree fire history reconstruction for the 20 th century." *Global Change Biology* 11 (3) (March): 398–420. doi:10.1111/j.1365-2486.2005.00920.x.

Mouillot, Florent, Serge Rambal, and Richard Joffre. 2002. "Simulating climate change impacts on fire frequency and vegetation dynamics in a Mediterranean-type ecosystem." *Global Change Biology* 8 (5) (May): 423–437. doi:10.1046/j.1365-2486.2002.00494.x.

Myers, Ronald L. 1985. "Fire and the dynamic relationship between Florida sandhill and sand pine scrub vegetation." *Bulletin of the Torrey Botanical Club* 112 (3) (September): 241–252. doi:10.2307/2996539.

Myers, Ronald L., and Deborah L. White. 1987. "Landscape history and changes in sandhill vegetation in north-central and south-central Florida." *Bulletin of the Torrey Botanical Club* 114 (1) (March): 21-32. doi:10.2307/2996386.

Myhre, Gunnar, Maria M. Kvælevåg, and Crystal B. Schaaf. 2005. "Radiative forcing due to anthropogenic vegetation change based on MODIS surface albedo data." *Geophysical Research Letters* 32 (21) (November): L21410 (4 p.). doi:10.1029/2005GL024004.

Nakićenović, Nebojsa, and Rob Swart, eds. 2000. *IPCC Special report on emissions scenarios (SRES)*. Cambridge, United Kingdom: Cambridge University Press.
http://www.grida.no/publications/other/ipcc_sr/?src=/climate/ipcc/emission/

Nakicenovic, Nebojsa, and Robert Swart, eds. 2000. *Special report on emissions scenarios: A special report of Working Group III of the Intergovernmental Panel on Climate Change*. Cambridge, United Kingdom: Cambridge University Press, October.
http://www.grida.no/publications/other/ipcc_sr/?src=/climate/ipcc/emission/index.htm

NASA. 2011. Research News: NASA Research Finds 2010 Tied for Warmest Year on Record. *National Aeronautics and Space Administration: Goddard Institute for Space Studies*.
<http://www.giss.nasa.gov/research/news/20110112/>

NASA, GISS. Data.GISS: GISS surface temperature analysis: 2010 how warm was this summer? Media. *GISS Surface Temperature Analysis (GISTEMP)*. <http://data.giss.nasa.gov/gistemp/2010summer/>

NASA, The Earth Observatory. World of change: Global temperatures □: Feature articles. Features. *World of Change: Decadal Temperatures*.
<http://earthobservatory.nasa.gov/Features/WorldOfChange/decadaltemp.php>

National Academy of Sciences. 2010. *Assessment of intraseasonal to interannual climate prediction and predictability*. Washington, D.C.: The National Academies Press.
<http://www.nap.edu/catalog/12878.html>

National Interagency Fire Center. Historically significant wildland fires. Fire Information - Statistics. *National Interagency Fire Center - Fire Information - Wildland Fire Statistics*.
http://www.nifc.gov/fireInfo/fireInfo_stats_histSigFires.html

National Research Council. 2010a. *Advancing the science of climate change □: America's Climate Choices*. 1st ed. Washington D.C.: National Academies Press.
<http://americasclimatechoices.org/panelscience.shtml>

—. 2010b. *Adapting to the impacts of climate change - America's climate choices: Panel on adapting to the impacts of climate change*. Washington, D.C.: National Academies Press.

<http://americasclimatechoices.org/paneladaptation.shtml>

—. 2010c. *Limiting the magnitude of future climate change*. Washington, D.C.: National Academies Press, December. <http://americasclimatechoices.org/panelmitigation.shtml>

Neary, Daniel G., Peter R. Robichaud, and Jan L. Beyers. 2000. Burned area emergency watershed rehabilitation: Program goals, techniques, effectiveness, and future directions in the 21st century. In *US Department of Agriculture Forest Service, Proceedings RMRS-P-13*, 13:375-378. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, March.

<http://forest.moscowfsl.wsu.edu/cgi-bin/engr/library/searchpub.pl?pub=2000q>

Neelin, J. David, and Mojib Latif. 1998. "El Niño dynamics." *Physics Today* 51 (12) (December): 32–36. doi:10.1063/1.882496.

Nelson, Daniel B., Mark B. Abbott, Byron Steinman, Pratigya J. Polissar, Nathan D. Stansell, Joseph D. Ortiz, Michael F. Rosenmeier, Bruce P. Finney, and Jon Riedel. 2011. "Drought variability in the Pacific Northwest from a 6,000-yr lake sediment record." *Proceedings of the National Academy of Sciences* 108 (10) (March 8): 3870-3875. doi:10.1073/pnas.1009194108.

Nelson, David M., and Feng Sheng Hu. 2008. "Patterns and drivers of Holocene vegetational change near the prairie–forest ecotone in Minnesota: Revisiting McAndrews' transect." *New Phytologist* 179 (2) (July): 449–459. doi:10.1111/j.1469-8137.2008.02482.x.

Nelson, David M., Feng Sheng Hu, Eric C. Grimm, B. Brandon Curry, and Jennifer E. Slate. 2006. "The influence of aridity and fire on Holocene prairie communities in the eastern Prairie Peninsula." *Ecology* 87 (10) (October): 2523–2536. doi:10.1890/0012-9658(2006)87[2523:TIOAAF]2.0.CO;2.

Nepstad, Daniel, Paul Lefebvre, Urbano Lopes da Silva, Javier Tomasella, Peter Schlesinger, Luiz Solorzano, Paulo Moutinho, David Ray, and Jose Guerreira Benito. 2004. "Amazon drought and its implications for forest flammability and tree growth: A basin-wide analysis." *Global Change Biology* 10 (5) (May): 704-717. doi:10.1111/j.1529-8817.2003.00772.x.

Nevle, Richard J., and Dennis K. Bird. 2008. "Effects of syn-pandemic fire reduction and reforestation in the tropical Americas on atmospheric CO₂ during European conquest." *Palaeogeography, Palaeoclimatology, Palaeoecology* 264 (1-2) (July 7): 25–38. doi:10.1016/j.palaeo.2008.03.008.

New, Mark. 2011. "Preface: Four degrees and beyond: The potential for a global temperature increase of four degrees and its implications." *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 369 (1934) (January 13): 4-5. doi:10.1098/rsta.2010.0304.

New, Mark, Diana Liverman, Heike Schroeder, and Kevin Anderson. 2011. "Four degrees and beyond: The potential for a global temperature increase of four degrees and its implications." *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 369 (1934) (January 13): 6-19. doi:10.1098/rsta.2010.0303.

Newell, Norman D., and Leslie Marcus. 1987. "Carbon dioxide and people." *PALAIOS* 2 (1): 101-103.

Niklasson, Mats, Igor Drobyshev, and Tomasz Zielonka. 2010. "A 400-year history of fires on lake islands in south-east Sweden." *International Journal of Wildland Fire* 19 (8) (December): 1050–1058. doi:10.1071/WF09117.

NOAA. 2010. NOAA Global Statistics. *NOAA: June, April to June, and Year-to-Date Global Temperatures are Warmest on Record.* http://www.noaanews.noaa.gov/stories2010/20100715_globalstats.html

—. 2011. NOAA: 2010 Tied for warmest year on record. *Global Stats.* http://www.noaanews.noaa.gov/stories2011/20110112_globalstats.html

NOAA ESRL. 2011. Co₂ Trends. Ftp. CO₂. ftp://ftp.cmdl.noaa.gov/ccg/co2/trends/co2_mm_mlo.txt.

NOAA NCDC. 2011a. 2010 Annual State of the Climate Global Analysis. NCDC - Global Analysis. *State of the Climate Global Analysis Annual 2010.* <http://www.ncdc.noaa.gov/sotc/global/2010/13>

—. 2011b. Normals Product Suite: Average U.S. temperature increases by 0.5 degrees F. NOAA News - Stories 2011. *Average U.S. temperature increases by 0.5 degrees F.* http://www.noaanews.noaa.gov/stories2011/20110629_newnormals.html

—. NCDC: Global surface temperature anomalies. Information and Gridded Dataset. *Temperature Anomaly.* <http://www.ncdc.noaa.gov/cmb-faq/anomalies.html>

NOAA, NCDC. World Data Center for Paleoclimatology - Data Sets Listing. Data Sets Listing. *NOAA Paleoclimatology.* <http://www.ncdc.noaa.gov/paleo/datalist.html>

Noss, Reed F., Jerry F. Franklin, William L. Baker, Tania Schoennagel, and Peter B. Moyle. 2006. "Managing fire-prone forests in the western United States." *Frontiers in Ecology and the Environment* 4 (9) (November): 481–487. doi:10.1890/1540-9295(2006)4[481:MFFITW]2.0.CO;2.

Noss, R.F., J.F. Franklin, W.L. Baker, T. Schoennagel, and P.B. Moyle. 2006. "Managing fire-prone forests in the western United States." *Frontiers in Ecology and the Environment* 4 (9): 481–487.

Nowacki, Gregory J., and Marc D. Abrams. 2008. "The demise of fire and 'mesophication' of forests in the eastern United States." *BioScience* 58 (2) (February): 123-138. doi:10.1641/B580207.

Nuzzo, Victoria A. 1986. "Extent and status of Midwest oak savanna: Presettlement and 1985." *Natural Areas Journal* 6 (2): 6–36.

O'Neill, Brian C., Michael Dalton, Regina Fuchs, Leiwen Jiang, Shonali Pachauri, and Katarina Zigova. 2010. "Global demographic trends and future carbon emissions." *Proceedings of the National Academy of Sciences* 107 (41) (October 12): 17521-17526. doi:10.1073/pnas.1004581107.

Odion, Dennis C., Evan J. Frost, James R. Strittholt, Hong Jiang, Dominick A. Dellasala, and Max A. Moritz. 2004. "Patterns of fire severity and forest conditions in the western Klamath Mountains, California." *Conservation Biology* 18 (4) (August): 927–936. doi:10.1111/j.1523-1739.2004.00493.x.

Okazaki, Yusuke, Axel Timmermann, Laurie Menzel, Naomi Harada, Ayako Abe-Ouchi, Megumi O. Chikamoto, Anne Mouchet, and Hirofumi Asahi. 2010. "Deepwater formation in the North Pacific during the Last Glacial Termination." *Science* 329 (5988) (July 9): 200-204. doi:10.1126/science.1190612.

Olivier, J.G.J., G. Janssens-Maenhout, J.A.H.W. Peters, and J. Wilson. 2011. *Long-term trend in global CO₂ emissions; 2011 report - PBL Netherlands Environmental Assessment Agency.*

<http://www.pbl.nl/en/publications/2011/long-term-trend-in-global-co2-emissions-2011-report>

Olson, David M., Eric Dinerstein, Eric D. Wikramanayake, Neil D. Burgess, George V. N. Powell, Emma C. Underwood, Jennifer A. D'amico, et al. 2001. "Terrestrial ecoregions of the world: A new map of life on Earth." *BioScience* 51 (11) (November): 933-938. doi:10.1641/0006-3568(2001)051[0933:TEOTWA]2.0.CO;2.

Olson, Richard J., F. Glenn Goff, and Jerry S. Olson. 1976. Development and applications of spatial data resources in energy related assessment and planning. In *Proceedings of the Advancements in Retrieval Technology as Related to Information Systems*, 12.1-12.7 (7 p.). Oak Ridge, TN.: Enviromental Sciences Division, Oak Ridge National Laboratory, January. <http://adsabs.harvard.edu/abs/1976STIN...7723609O>

Orwig, David A., and Marc D. Abrams. 1994. "Land-use history (1720-1992), composition, and dynamics of oak-pine forests within the Piedmont and Coastal Plain of northern Virginia." *Canadian Journal of Forest Research* 24 (6) (June): 1216–1225. doi:10.1139/x94-160.

Ostrom, Elinor. 2009. *A polycentric approach for coping with climate change*. Policy Research Working Paper. The Policy Research Working Paper Series. Workshop in Political Theory and Policy Analysis, Indiana University: World Bank, October.

<http://wdronline.worldbank.org/worldbank/a/nonwdrdetail/162>

Otterå, Odd Helge, Mats Bentsen, Helge Drange, and Lingling Suo. 2010. "External forcing as a metronome for Atlantic multidecadal variability." *Nature Geoscience* 3 (10) (October): 688-694. doi:10.1038/ngeo955.

Ottmar, Roger D., David V. Sandberg, Cynthia L. Riccardi, and Susan J. Prichard. 2007. "An overview of the Fuel Characteristic Classification System - Quantifying, classifying, and creating fuelbeds for resource planning." *Canadian Journal of Forest Research* 37 (12) (December): 2383–2393. doi:10.1139/X07-077.

Otto, John Solomon. 1983. "The decline of forest farming in southern Appalachia." *Journal of Forest History* 27 (1) (January): 18–27. doi:10.2307/4004858.

Overpeck, Jonathan T., Robert S. Webb, and Thompson Webb III. 1992. "Mapping eastern North American vegetation change of the past 18 ka: No-analogs and the future." *Geology* 20 (12) (December): 1071–1074. doi:10.1130/0091-7613(1992)020<1071:MENAVC>2.3.CO;2.

Overpeck, Jonathan T., Cathy Whitlock, and Brian Huntley. 2003. Terrestrial biosphere dynamics in the climate system: Past and future (Chapter 5). In *Paleoclimate, Global Change and the Future*, 81-111. 1st ed. The IGBP (International Geosphere-Biosphere Programme) Series. Verlag, Berlin, Heidelberg: Springer. <http://www.ak-geomorphologie.de/data/pgcf/chapter5.pdf>

Overpeck, Jonathan T., Gerald A. Meehl, Sandrine Bony, and David R. Easterling. 2011. "Climate data challenges in the 21st century." *Science* 331 (6018) (February 11): 700-702. doi:10.1126/science.1197869.

Pacala, S. 2004. "Stabilization Wedges: Solving the Climate Problem for the Next 50 Years with Current Technologies." *Science* 305 (August 13): 968-972. doi:10.1126/science.1100103.

Pagani, Mark, James C. Zachos, Katherine H. Freeman, Brett Tipple, and Stephen Bohaty. 2005. "Marked decline in atmospheric carbon dioxide concentrations during the Paleogene." *Science* 309 (5734) (July 22): 600-603. doi:10.1126/science.1110063.

Page, Susan E., Florian Siegert, John O. Rieley, Hans-Dieter V. Boehm, Adi Jaya, and Suwido Limin. 2002. "The amount of carbon released from peat and forest fires in Indonesia during 1997." *Nature* 420 (6911) (November 7): 61-65. doi:10.1038/nature01131.

Le Page, Yannick, Duarte Oom, João M. N. Silva, Per Jönsson, and José M. C. Pereira. 2010. "Seasonality of vegetation fires as modified by human action: Observing the deviation from eco-climatic fire regimes." *Global Ecology and Biogeography* 19 (4) (July): 575-588. doi:10.1111/j.1466-8238.2010.00525.x.

Pan, Yude, Richard A. Birdsey, Jingyun Fang, Richard Houghton, Pekka E. Kauppi, Werner A. Kurz, Oliver L. Phillips, et al. 2011. "A large and persistent carbon sink in the world's forests." *Science* 333 (6045) (August 19): 988-993. doi:10.1126/science.1201609.

Parisien, Marc-André, and Max A. Moritz. 2009. "Environmental controls on the distribution of wildfire at multiple spatial scales." *Ecological Monographs* 79 (1) (February): 127-154. doi:10.1890/07-1289.1.

Parisien, Marc-André, Vernon S. Peters, Yonghe Wang, John M. Little, Erin M. Bosch, and Brian J. Stocks. 2006. "Spatial patterns of forest fires in Canada, 1980–1999." *International Journal of Wildland Fire* 15 (3) (September): 361–374. doi:10.1071/WF06009.

Parmesan, Camille. 2006. "Ecological and evolutionary responses to recent climate change." *Annual Review of Ecology, Evolution, and Systematics* 37 (1) (December): 637-669. doi:10.1146/annurev.ecolsys.37.091305.110100.

Parmesan, Camille, Carlos Duarte, Elvira Poloczanska, Anthony J. Richardson, and Michael C. Singer. 2011. "Overstretching attribution." *Nature Climate Change* 1 (April): 2-4. doi:10.1038/nclimate1056.

Parshall, Tim, David R. Foster, Edward Faison, D. MacDonald, and Barbara C. S. Hansen. 2003. "Long-term history of vegetation and fire in pitch pine-oak forests on Cape Cod, Massachusetts." *Ecology* 84 (3) (March): 736–748. doi:10.1890/0012-9658(2003)084[0736:LTHOVA]2.0.CO;2.

Parsons, David J., and Steven H. DeBenedetti. 1979. "Impact of fire suppression on a mixed-conifer forest." *Forest Ecology and Management* 2: 21–33. doi:10.1016/0378-1127(79)90034-3.

Pausas, Juli G. 1999. "Response of plant functional types to changes in the fire regime in Mediterranean ecosystems: A simulation approach." *Journal of Vegetation Science* 10 (5) (October): 717–722. doi:10.2307/3237086.

Pausas, Juli G., and Jon E. Keeley. 2009. "A burning story: The role of fire in the history of life." *BioScience* 59 (7) (August): 593–601. doi:10.1525/bio.2009.59.7.10.

Pausas, Juli G., Ross A. Bradstock, David A. Keith, and Jon E. Keeley. 2004. "Plant functional traits in relation to fire in crown-fire ecosystems." *Ecology* 85 (4) (April): 1085-1100. doi:10.1890/02-4094.

Pausata, Francesco S. R., David S. Battisti, Kerim H. Nisancioglu, and Cecilia M. Bitz. 2011. "Chinese stalagmite $\delta^{18}\text{O}$ controlled by changes in the Indian monsoon during a simulated Heinrich event." *Nature Geoscience* 4 (7) (July): 474–480. doi:10.1038/ngeo1169.

- Pearson, Paul N. 2010. "Increased atmospheric CO₂ during the Middle Eocene." *Science* 330 (6005) (November 5): 763-764. doi:10.1126/science.1197894.
- Pechony, Olga, and Drew T. Shindell. 2009. "Fire parameterization on a global scale." *Journal of Geophysical Research* 114 (16) (August): D16115 (10 p.). doi:10.1029/2009JD011927.
- . 2010. "Driving forces of global wildfires over the past millennium and the forthcoming century." *Proceedings of the National Academy of Sciences* 107 (45) (November 9): 19167-19170. doi:10.1073/pnas.1003669107.
- Pederson, Gregory T., Stephen T. Gray, Connie A. Woodhouse, Julio L. Betancourt, Daniel B. Fagre, Jeremy S. Littell, Emma Watson, Brian H. Luckman, and Lisa J. Graumlich. 2011. "The unusual nature of recent snowpack declines in the North American cordillera." *Science* 333 (6040) (July 15): 332-335. doi:10.1126/science.1201570.
- Pelletier, Johanne, Navin Ramankutty, and Catherine Potvin. 2011. "Diagnosing the uncertainty and detectability of emission reductions for REDD + under current capabilities: an example for Panama." *Environmental Research Letters* 6 (April 1): 024005. doi:10.1088/1748-9326/6/2/024005.
- Pereira, Mário G., Ricardo M. Trigo, Carlos C. da Camara, José M. C. Pereira, and Solange M. Leite. 2005. "Synoptic patterns associated with large summer forest fires in Portugal." *Agricultural and Forest Meteorology* 129 (1-2) (March 28): 11-25. doi:10.1016/j.agrformet.2004.12.007.
- Peterson, Seth H., Max A. Moritz, Marco E. Morais, Philip E. Dennison, and Jean M. Carlson. 2011. "Modelling long-term fire regimes of southern California shrublands." *International Journal of Wildland Fire* 20 (1) (February): 1-16. doi:10.1071/WF09102.
- Petit, Jean-Robert, J. Jouzel, Dominique Raynaud, Narcisse I. Barkov, Jean-Marc Barnola, Isabelle Basile, Michael Bender, et al. 1999. "Climate and atmospheric history of the past 420,000 years from the Vostok ice core, Antarctica." *Nature* 399 (6735) (June 3): 429–436. doi:10.1038/20859.
- Petit, Rémy J., Feng Sheng Hu, and Christopher W. Dick. 2008. "Forests of the past: A window to future changes." *Science* 320 (5882) (June 13): 1450-1452. doi:10.1126/science.1155457.
- Pfeiffer, Kent E., and Allen A. Steuter. 1994. "Preliminary response of sandhills prairie to fire and bison grazing." *Journal of Range Management* 47 (5) (September): 395-397. doi:10.2307/4002337.
- Phillips, Norman A. 1954. "Energy transformations and meridional circulations associated with simple baroclinic waves in a two-level, quasi-geostrophic model." *Tellus* 6 (3) (August): 273-286. doi:10.1111/j.2153-3490.1954.tb01123.x.
- . 1956. "The general circulation of the atmosphere: A numerical experiment." *Quarterly Journal of the Royal Meteorological Society* 82 (352) (April): 123–164. doi:10.1002/qj.49708235202.
- Pielke Sr., Roger A., Gregg Marland, Richard A. Betts, Thomas N. Chase, Joseph L. Eastman, John O. Niles, Dev dutta S. Niyogi, and Steven W. Running. 2002. "The influence of land-use change and landscape dynamics on the climate system: Relevance to climate-change policy beyond the radiative effect of greenhouse gases." *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 360 (1797) (August 15): 1705-1719. doi:10.1098/rsta.2002.1027.

Pielou, Evelyn Christine. 1992. *After the Ice Age: The return of life to glaciated North America*. reprint, illustrated. Chicago, IL: University of Chicago Press, December.

<http://www.press.uchicago.edu/ucp/books/book/chicago/A/bo3697245.html>

Pierce, Jennifer L., Grant A. Meyer, and A. J. Timothy Jull. 2004. "Fire-induced erosion and millennial-scale climate change in northern ponderosa pine forests." *Nature* 432 (7013) (November 4): 87-90. doi:10.1038/nature03058.

Pierce, Jennifer, and Grant Meyer. 2008. "Long-term fire history from alluvial fan sediments: The role of drought and climate variability, and implications for management of Rocky Mountain forests." *International Journal of Wildland Fire* 17 (1) (February): 84-95. doi:10.1071/WF07027.

Pietruska, Jamie L. 2011. "US Weather Bureau Chief Willis Moore and the reimagining of uncertainty in long-range forecasting." *Environment and History* 17 (1) (February): 79-105. doi:10.3197/096734011X12922359172970.

Pitcher, Hugh M. 2009. "The future of scenarios: Issues in developing new climate change scenarios." *Environmental Research Letters* 4 (2) (June): 025002 (7 p.). doi:10.1088/1748-9326/4/2/025002.

Platt, William J., Brian Beckage, Robert F. Doren, and Harold H. Slater. 2002. "Interactions of large-scale disturbances: Prior fire regimes and hurricane mortality of savanna pines." *Ecology* 83 (6) (June): 1566-1572. doi:10.1890/0012-9658(2002)083[1566:IOLSDP]2.0.CO;2.

Podur, Justin, and Michael Wotton. 2010. "Will climate change overwhelm fire management capacity?" *Ecological Modelling* 221 (9) (May 10): 1301-1309. doi:10.1016/j.ecolmodel.2010.01.013.

Pogoreltsev, Alexander I., Anna Yu. Kanukhina, Ekaterina V. Suvorova, and Elena N. Savenkova. 2009. "Variability of planetary waves as a signature of possible climatic changes." *Journal of Atmospheric and Solar-Terrestrial Physics* 71 (14-15) (October): 1529-1539. doi:10.1016/j.jastp.2009.05.011.

Pongratz, Julia, Ken Caldeira, Christian H. Reick, and Martin Claussen. 2011. "Coupled climate-carbon simulations indicate minor global effects of wars and epidemics on atmospheric CO₂ between AD 800 and 1850." *The Holocene* Published online before print (January 20). doi:10.1177/0959683610386981. <http://hol.sagepub.com/cgi/doi/10.1177/0959683610386981>

Potter, Christopher, Pang-Ning Tan, Vipin Kumar, Chris Kucharik, Steven Klooster, Vanessa Genovese, Warren Cohen, and Sean Healey. 2005. "Recent history of large-scale ecosystem disturbances in North America derived from the AVHRR satellite record." *Ecosystems* 8 (7) (November): 808-824. doi:10.1007/s10021-005-0041-6.

Powell, Douglas S., Joanne L. Faulkner, David R. Darr, Zhiliang Zhu, and Douglas W. MacCleery. 1993. *Forest resources of the United States, 1992*. General Technical Report. Fort Collins, CO: U.S. Department of Agriculture, Rocky Mountain Forest and Range Experiment Station, September. Http://www.fs.fed.us/rm/pubs_rm/rm_gtr234.html. <http://www.treesearch.fs.fed.us/pubs/6241>

Powell, Kristin I., Jonathan M. Chase, and Tiffany M. Knight. 2011. "A synthesis of plant invasion effects on biodiversity across spatial scales." *American Journal of Botany* 98 (3) (March): 539-548. doi:10.3732/ajb.1000402.

Power, Mitchell J., Jennifer Marlon, Natalie Ortiz, Patrick J. Bartlein, Sandy P. Harrison, Francis E. Mayle, Aziz Ballouche, et al. 2008. "Changes in fire regimes since the Last Glacial Maximum: An assessment

based on a global synthesis and analysis of charcoal data." *Climate Dynamics* 30 (7-8) (June): 887-907. doi:10.1007/s00382-007-0334-x.

Power, Scott, Malcolm Haylock, Rob Colman, and Xiangdong Wang. 2006. "The predictability of interdecadal changes in ENSO activity and ENSO teleconnections." *Journal of Climate* 19 (19) (October): 4755-4771. doi:10.1175/JCLI3868.1.

Prentice, I. Colin, and Thompson Webb III. 1998. "BIOME 6000: Reconstructing global mid-Holocene vegetation patterns from palaeoecological records." *Journal of Biogeography* 25 (6) (November): 997-1005. doi:10.1046/j.1365-2699.1998.00235.x.

Prentice, I. Colin, Wolfgang Cramer, Sandy P. Harrison, Rik Leemans, Robert A. Monserud, and Allen M. Solomon. 1992. "Special paper: A global biome model based on plant physiology and dominance, soil properties and climate." *Journal of Biogeography* 19 (2) (March): 117-134.

Prestemon, Jeffrey P., and Geoffrey H. Donovan. 2008. "Forecasting resource-allocation decisions under climate uncertainty: Fire suppression with assessment of net benefits of research." *American Journal of Agricultural Economics* 90 (4) (November): 1118-1129. doi:10.1111/j.1467-8276.2008.01152.x.

Price, Colin, and David Rind. 1994. "Possible implications of global climate change on global lightning distributions and frequencies." *Journal of Geophysical Research* 99 (D5) (May 20): 10823-10831. doi:10.1029/94JD00019.

Pugh, Evan, and Eric Small. 2011. "The impact of pine beetle infestation on snow accumulation and melt in the headwaters of the Colorado River." *Ecohydrology* Article first published online (June 7). doi:10.1002/eco.239. <http://doi.wiley.com/10.1002/eco.239>

Pyne, Stephen J. 1982. *Fire in America: A cultural history of wildland and rural fire*. 1st ed. Princeton, New Jersey: Princeton University Press.

http://www.stephenpyne.com/cycle_of_fire_and_more_92910.htm

———. 1990. "Firestick history." *The Journal of American History* 76 (4) (March): 1132-1141.

———. 2001. *Year of the fires: The story of the Great Fires of 1910*. Illustrated edition. New York, NY: Viking Adult, May.

http://www.stephenpyne.com/year_of_the_fires_the_story_of_the_great_fires_of_1910_92911.htm

Pyne, Stephen J., Patricia L. Andrews, and Richard D. Laven. 1996. Fire ecology (Chapter 5). In *Introduction to wildland fire*, 171-212. 2nd ed. New York, NY: John Wiley & Sons Inc., April.

<http://www.nrem.iastate.edu/class/nrem390.htm>

Pyne, Stephen J., Patricia L. Andrews, and Richard D. Laven. 1996. *Introduction to wildland fire*. 2nd ed. New York, NY: John Wiley & Sons Inc., April.

http://books.google.com/books?id=yT6bzpUyFlwC&printsec=frontcover&dq=Introduction+to+wildland+fire&source=bl&ots=AfnVYY8Jxw&sig=Rq2Oc1aBwvbX8eNKutRwTmPm9XY&hl=en&ei=CzRLTYieFIOclgfMqfXeDw&sa=X&oi=book_result&ct=result&resnum=6&ved=0CD0Q6AEwBQ#v=onepage&q&f=true

Qiu, Jane. 2009. "Arctic ecology: Tundra's burning." *Nature* 461 (7260) (September 3): 34-36. doi:10.1038/461034a.

Le Quéré, Corinne, Michael R. Raupach, Josep G. Canadell, Gregg Marland, Laurent Bopp, Philippe Ciais, Thomas J. Conway, et al. 2009. "Trends in the sources and sinks of carbon dioxide." *Nature Geoscience* 2 (12) (December): 831-836. doi:10.1038/ngeo689.

Rajagopalan, Balaji, Edward Cook, Upmanu Lall, and Bonnie K. Ray. 2000. "Spatiotemporal variability of ENSO and SST teleconnections to summer drought over the United States during the twentieth century." *Journal of climate* 13 (24) (December): 4244–4255. doi:10.1175/1520-0442(2000)013<4244:SVOEAS>2.0.CO;2.

Randerson, James T., Heping Liu, Mark G. Flanner, Scott D. Chambers, Yufang Jin, Peter G. Hess, Gabriele Pfister, et al. 2006. "The impact of boreal forest fire on climate warming." *Science* 314 (5802) (November 17): 1130-1132. doi:10.1126/science.1132075.

Raphael, Marilyn N. 2003. "The Santa Ana winds of California." *Earth Interactions* 7 (8) (August): 1-13. doi:10.1175/1087-3562(2003)007<0001:TSAWOC>2.0.CO;2.

Raupach, Michael R., Gregg Marland, Philippe Ciais, Corinne Le Quere, Josep G. Canadell, Gernot Klepper, and Christopher B. Field. 2007. "Global and regional drivers of accelerating CO₂ emissions." *Proceedings of the National Academy of Sciences* 104 (24) (June 12): 10288-10293. doi:10.1073/pnas.0700609104.

Reardon, James, Roger Hungerford, and Kevin Ryan. 2007. "Factors affecting sustained smouldering in organic soils from pocosin and pond pine woodland wetlands." *International Journal of Wildland Fire* 16 (1) (February): 107–118. doi:10.1071/WF06005.

Reeve, N., and Ralf Toumi. 1999. "Lightning activity as an indicator of climate change." *Quarterly Journal of the Royal Meteorological Society* 125 (555) (April): 893-903. doi:10.1002/qj.49712555507.

Rehfeldt, Gerald E., Nicholas. L Crookston, Marcus V. Warwell, and Jeffrey S. Evans. 2006. "Empirical analyses of plant-climate relationships for the western United States." *International Journal of Plant Sciences* 167 (6) (November): 1123–1150. <http://www.treesearch.fs.fed.us/pubs/25706> doi:10.1086/507711.

Reichert, Peter, and Mark E. Borsuk. 2005. "Does high forecast uncertainty preclude effective decision support?" *Environmental Modelling and Software* 20 (8) (August): 991–1001. doi:10.1016/j.envsoft.2004.10.005.

Reick, Christian H., Thomas Raddatz, Julia Pongratz, and Martin Claussen. 2010. "Contribution of anthropogenic land cover change emissions to pre-industrial atmospheric CO₂." *Tellus B (Special Issue)* 62 (5) (November): 329-336. doi:10.1111/j.1600-0889.2010.00479.x.

Renkin, Roy A., and Don G. Despain. 1992. "Fuel moisture, forest type, and lightning-caused fire in Yellowstone National Park." *Canadian Journal of Forest Research* 22 (1) (January): 37–45. doi:10.1139/x92-005.

Revelle, Roger. 1982. "Carbon dioxide and world climate." *Scientific American* 247 (2) (August): 35-43. <http://books.google.com/books?hl=en&lr=&id=VN7WFz9Aq68C&oi=fnd&pg=PA154&dq=Roger+Revelle+Source:+Scientific+American+247+%282%29%281982%29&ots=eoJpo0GnLf&sig=QHMHgx-cD1PEMMiKvVKvMLseqQY#v=onepage&q=Roger%20Revelle%20Source%3A%20Scientific%20American%20247%20%282%29%281982%29&f=false>

- Reyes, Alberto V., and Colin A. Cooke. 2011. "Northern peatland initiation lagged abrupt increases in deglacial atmospheric CH₄." *Proceedings of the National Academy of Sciences* 108 (12) (March 22): 4748-4753. doi:10.1073/pnas.1013270108.
- Richardson, Lewis Fry. 1922. *Weather prediction by numerical process*. 2nd ed. Cambridge Mathematical Library. London: Cambridge University Press.
<http://www.cambridge.org/catalogue/catalogue.asp?isbn=9780521680448>
- Rind, David. 2002. "The Sun's role in climate variations." *Science* 296 (5568) (April 26): 673-677. doi:10.1126/science.1069562.
- Roads, John, Francis Fujioka, Shyh-Chin Chen, and R. Burgan. 2005. "Seasonal fire danger forecasts for the USA." *International Journal of Wildland Fire* 14 (1) (March): 1–18. doi:10.1071/WF03052.
- Rogelj, Joeri, Julia Nabel, Claudine Chen, William Hare, Kathleen Markmann, Malte Meinshausen, Michiel Schaeffer, Kirsten Macey, and Niklas Höhne. 2010. "Copenhagen accord pledges are paltry." *Nature* 464 (7292) (April 22): 1126-1128. doi:10.1038/4641126a.
- Rollins, Matthew G. 2009. "LANDFIRE: A nationally consistent vegetation, wildland fire, and fuel assessment." *International Journal of Wildland Fire* 18 (3) (May): 235–249. doi:10.1071/WF08088.
- Rollins, Matthew G., Robert E. Keane, and Russell A. Parsons. 2004. "Mapping fuels and fire regimes using remote sensing, ecosystem simulation, and gradient modeling." *Ecological Applications* 14 (1) (January): 75-95. doi:10.1890/02-5145.
- Rollins, Matthew G., Penelope Morgan, and Thomas Swetnam. 2002. "Landscape-scale controls over 20th century fire occurrence in two large Rocky Mountain (USA) wilderness areas." *Landscape Ecology* 17 (6) (August): 539-557. doi:10.1023/A:1021584519109.
- Romme, William H., and Dennis H. Knight. 1981. "Fire frequency and subalpine forest succession along a topographic gradient in Wyoming." *Ecology* 62 (2) (April): 319–326. doi:10.2307/1936706.
- Romme, William H. 1982. "Fire and landscape diversity in subalpine forests of Yellowstone National Park." *Ecological Monographs* 52 (2) (June): 199–221. doi:10.2307/1942611.
- Romme, WH, J. Clement, J. Hicke, D. Kulakowski, LH MacDonald, TL Schoennagel, and TT Veblen. 2006. "Recent forest insect outbreaks and fire risk in Colorado forests: a brief synthesis of relevant research."
- Root, Terry L., Dena P. MacMynowski, Michael D. Mastrandrea, and Stephen H. Schneider. 2005. "Human-modified temperatures induce species changes: Joint attribution." *Proceedings of the National Academy of Sciences* 102 (21) (May 24): 7465-7469. doi:10.1073/pnas.0502286102.
- Rothermel, Richard C. 1972. *A mathematical model for predicting fire spread in wildland fuels*. Research Paper. Ogden, UT: U.S. Department of Agriculture, Intermountain Forest and Range Experiment Station, January. <http://www.treesearch.fs.fed.us/pubs/32533>
- . 1983. *How to predict the spread and intensity of forest and range fires*. General Technical Report. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station, June. <http://www.treesearch.fs.fed.us/pubs/24635>

- Rowe, J. Stan, and John W. Sheard. 1981. "Ecological land classification: A survey approach." *Environmental Management* 5 (5) (September): 451-464. doi:10.1007/BF01866822.
- Ruddiman, William F. 2007. "The early anthropogenic hypothesis: Challenges and responses." *Reviews of Geophysics* 45 (4) (October): RG4001 (37 p.). doi:10.1029/2006RG000207.
- Ruddiman, William F., John E. Kutzbach, and Stephen J. Vavrus. 2011. "Can natural or anthropogenic explanations of late-Holocene CO₂ and CH₄ increases be falsified?" *The Holocene* 21 (5) (August): 865-879. doi:10.1177/0959683610387172.
- Ruffner, Charles M., and Marc D. Abrams. 1998. "Lightning strikes and resultant fires from archival (1912-1917) and current (1960-1997) information in Pennsylvania." *Journal of the Torrey Botanical Society* 125 (3) (September): 249-252.
- Runkle, James R. 1985. Disturbance regimes in temperate forests. In *The Ecology of Natural Disturbance and Patch Dynamics*, 17-33. 1st ed. Orlando, New York: Academic Press.
http://books.google.com/books?id=jIj-gAfIWxQC&pg=PA17&lpg=PA17&dq=Disturbance+regimes+in+temperate+forests.&source=bl&ots=A5E2iWFUvX&sig=VPHVgfScxdUGKGBqnW3KcOC0iaQ&hl=en&ei=CJ4OTvxvxDqnw0gGM2ISkDg&sa=X&oi=book_result&ct=result&resnum=3&ved=0CDEQ6AEwAg#v=onepage&q=Disturbance%20regimes%20in%20temperate%20forests.&f=false
- Running, Steven W. 2006. "Climate change: Is global warming causing more, larger wildfires?" *Science* 313 (5789) (August 18): 927-928. doi:10.1126/science.1130370.
- . 2008. "Ecosystem disturbance, carbon, and climate." *Science* 321 (5889) (August 1): 652-653. doi:10.1126/science.1159607.
- Rupp, T. Scott, Anthony M. Starfield, F. Stuart Chapin III, and Paul Duffy. 2002. "Modeling the impact of black spruce on the fire regime of Alaskan boreal forest." *Climatic Change* 55 (1-2) (October): 213-233. doi:10.1023/A:1020247405652.
- Russell, Emily W. B. 1983. "Indian-set fires in the forests of the northeastern United States." *Ecology* 64 (1) (February): 78-88. doi:10.2307/1937331.
- Russell-Smith, Jeremy, Cameron Yates, Andrew Edwards, Grant E. Allan, Garry D. Cook, Peter Cooke, Ron Craig, Belinda Heath, and Richard Smith. 2003. "Contemporary fire regimes of northern Australia, 1997-2001: Change since Aboriginal occupancy, challenges for sustainable management." *International Journal of Wildland Fire* 12 (4) (January): 283-297. doi:10.1071/WF03015.
- Ryan, Kevin C. 1991. "Vegetation and wildland fire: Implications of global climate change." *Environment International* 17 (2-3): 169-178. doi:10.1016/0160-4120(91)90099-C.
- Sala, Osvaldo E., F. Stuart Chapin III, Juan J. Armesto, Eric Berlow, Janine Bloomfield, Rodolfo Dirzo, Elisabeth Huber-Sanwald, et al. 2000. "Global biodiversity scenarios for the Year 2100." *Science* 287 (5459) (March 10): 1770-1774. doi:10.1126/science.287.5459.1770.
- Salathé Jr., Eric P., Philip W. Mote, and Matthew W. Wiley. 2007. "Review of scenario selection and downscaling methods for the assessment of climate change impacts on hydrology in the United States pacific northwest." *International Journal of Climatology* 27 (12) (October): 1611-1621. doi:10.1002/joc.1540.

Salzmann, Ulrich, Alan M. Haywood, and Daniel J. Lunt. 2009. "The past is a guide to the future? Comparing Middle Pliocene vegetation with predicted biome distributions for the twenty-first century." *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 367 (1886) (January 13): 189-204. doi:10.1098/rsta.2008.0200.

Samanta, Arindam, Marcos H. Costa, Edson L. Nunes, Simone A. Vieira, Liang Xu, and Ranga B. Myneni. 2011. "Comment on 'Drought-induced reduction in global terrestrial net primary production from 2000 through 2009'." *Science* 333 (6046) (August 26): 1093-1093. doi:10.1126/science.1199048.

Sandberg, David V., Roger D. Ottmar, Janice L. Peterson, and John Core. 2002. *Wildland fire in ecosystems: Effects of fire on air*. General Technical Report. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, December.

<http://www.treesearch.fs.fed.us/pubs/5247>

Sandel, Brody, and Emily M. Dangremond. 2011. "Climate change and the invasion of California by grasses." *Global Change Biology* Published online (July): 13 p. doi:10.1111/j.1365-2486.2011.02480.x.

Sanderson, Benjamin M., Brian C. O'Neill, Jeffrey T. Kiehl, Gerald A. Meehl, Reto Knutti, and Warren M. Washington. 2011. "The response of the climate system to very high greenhouse gas emission scenarios." *Environmental Research Letters* 6 (3) (September): 034005 (11 p.). doi:10.1088/1748-9326/6/3/034005.

Sauer, Carl O. 1952. *Agricultural origins and dispersals*. Bowman Memorial Lectures. Ser. 2. New York, NY: The American Geographical Society, George Grady Press.

<http://www.archive.org/details/agriculturalorig033518mbp>

Saveland, James M. 1995. Fire in the forest. In *Forest Health Through Silviculture: Proceedings of the 1995 National Silviculture Workshop*, 14-19. General Technical Report RM-GTR-267. Fort Collins, CO: U.S. Dept. of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station, September. <http://treesearch.fs.fed.us/pubs/5136>

Saxon, Earl, Barry Baker, William Hargrove, Forrest Hoffman, and Chris Zganjar. 2005. "Mapping environments at risk under different global climate change scenarios." *Ecology Letters* 8 (1) (January): 53–60. doi:10.1111/j.1461-0248.2004.00694.x.

Schaefer, Kevin, Tingjun Zhang, Lori Bruhwiler, and Andrew P. Barrett. 2011. "Amount and timing of permafrost carbon release in response to climate warming." *Tellus B* 63 (2) (April): 165–180. doi:10.1111/j.1600-0889.2011.00527.x.

Schär, Christoph, Pier Luigi Vidale, Daniel Lüthi, Christoph Frei, Christian Häberli, Mark A. Liniger, and Christof Appenzeller. 2004. "The role of increasing temperature variability in European summer heatwaves." *Nature* 427 (6972) (January 22): 332-336. doi:10.1038/nature02300.

Schmidt, Gavin A., Reto A. Ruedy, Ron L. Miller, and Andy A. Lacis. 2010. "Attribution of the present-day total greenhouse effect." *Journal of Geophysical Research* 115 (20) (October): D20106 (6 p.). doi:10.1029/2010JD014287.

Schmidt, Kirsten M., James P. Menakis, Colin C. Hardy, Wendel J. Hann, and David L. Bunnell. 2002. *Development of coarse-scale spatial data for wildland fire and fuel management*. General Technical Report. Fort Collins, CO: Publications Distribution U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, April. <http://www.fs.fed.us/rm/pubs/rmr87.html>

Schmittner, Andreas, Andreas Oschlies, H. Damon Matthews, and Eric D. Galbraith. 2008. "Future changes in climate, ocean circulation, ecosystems, and biogeochemical cycling simulated for a business-as-usual CO₂ emission scenario until year 4000 AD." *Global Biogeochemical Cycles* 22 (February): GB1013 (21 p.). doi:10.1029/2007GB002953.

Schoennagel, Tania, Thomas T. Veblen, and William H. Romme. 2004. "The interaction of fire, fuels, and climate across Rocky Mountain forests." *BioScience* 54 (7) (July): 661-676. doi:10.1641/0006-3568(2004)054[0661:TIOFFA]2.0.CO;2.

Schoennagel, Tania, Thomas T. Veblen, William H. Romme, Jason S. Sibold, and Edward R. Cook. 2005. "ENSO and PDO variability affect drought-induced fire occurrence in Rocky Mountain subalpine forests." *Ecological Applications* 15 (6) (December): 2000–2014. doi:10.1890/04-1579.

Schoennagel, T. T.T. Veblen, D. Kulakowski, and A.S. Holz. 2007. "Multidecadal climate variability and climate interactions affect subalpine fire occurrence, western Colorado (USA)." *Ecology* 88 (11): 2891–2902.

Scholl, Andrew E., and Alan H. Taylor. 2006. "Regeneration patterns in old-growth red fir–western white pine forests in the northern Sierra Nevada, Lake Tahoe, USA." *Forest Ecology and Management* 235 (1-3) (November 1): 143–154. doi:10.1016/j.foreco.2006.08.006.

—. 2010. "Fire regimes, forest change, and self-organization in an old-growth mixed-conifer forest, Yosemite National Park, USA." *Ecological Applications* 20 (2) (March): 362–380. doi:10.1890/08-2324.1.

Schroeder, Mark J., and Charles C. Buck. 1970. *Fire weather: A guide for application of meteorological information to forest fire control operations*. U.S. Department of Agriculture Forest Service; Agriculture Handbook 360, May. <http://digitalcommons.usu.edu/barkbeetles/14/>

Schroeder, Mark J., Glovinsky Monte, Virgil F. Henricks, Frank C. Hood, Melvin K. Hull, Henry L. Jacobson, Robert Kirkpatrick, et al. 1964. *Synoptic weather types associated with critical fire weather*. Scientific And Technical Information: Meteorology and Civil Defense. Office of Civil Defense, Office of the Secretary of the Army: Pacific Southwest Forest And Range Experiment Station Berkeley CA, Forest Service, U.S. Department of Agriculture.

<http://oai.dtic.mil/oai/oai?verb=getRecord&metadataPrefix=html&identifier=AD0449630>

Schubert, Siegfried, Hailan Wang, and Max Suarez. 2011. "Warm season subseasonal variability and climate extremes in the Northern Hemisphere: The role of stationary Rossby waves." *Journal of Climate* Submitted to the Journal of Climate (MERRA Special Issue): 54 p.

Schuler, Thomas M., and W. Russ McClain. 2003. *Fire history of a ridge and valley oak forest*. Research Paper. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northeastern Research Station, April. <http://www.treesearch.fs.fed.us/pubs/5600>

Schulte, Lisa A., and David J. Mladenoff. 2005. "Severe wind and fire regimes in northern forests: Historical variability at the regional scale." *Ecology* 86 (2) (February): 431-445. doi:10.1890/03-4065.

Schulte, Lisa A., David J. Mladenoff, Thomas R. Crow, Laura C. Merrick, and David T. Cleland. 2007. "Homogenization of northern U.S. Great Lakes forests due to land use." *Landscape Ecology* 22 (7) (August): 1089-1103. doi:10.1007/s10980-007-9095-5.

- Schultz, Martin G. 2002. "On the use of ATSR fire count data to estimate the seasonal and interannual variability of vegetation fire emissions." *Atmospheric Chemistry and Physics* 2 (5) (November): 387–395. doi:10.5194/acpd-2-1159-2002.
- Schwartz, Mark W., Louis R. Iverson, Anantha M. Prasad, Stephen N. Matthews, and Raymond J. O'Connor. 2006. "Predicting extinctions as a result of climate change." *Ecology* 87 (7) (July): 1611–1615. doi:10.1890/0012-9658(2006)87[1611:PEAARO]2.0.CO;2.
- Schwartz, Stephen E. 2011. "Feedback and sensitivity in an electrical circuit: An analog for climate models." *Climatic Change* 106 (2) (May): 315–326. doi:10.1007/s10584-010-9903-9.
- Scott, Andrew C. 1989. "Observations on the nature and origin of fusain." *International Journal of Coal Geology* 12 (1-4) (June): 443–475. doi:10.1016/0166-5162(89)90061-X.
- . 2000. "The Pre-Quaternary history of fire." *Palaeogeography, Palaeoclimatology, Palaeoecology* 164 (1-4) (December): 281-329. doi:10.1016/S0031-0182(00)00192-9.
- . 2008. "Terrestrial biosphere: The burning issue." *Nature Geoscience* 1 (10) (October): 643-644. doi:10.1038/ngeo321.
- Scott, Andrew C., and Ian J. Glasspool. 2006. "The diversification of Paleozoic fire systems and fluctuations in atmospheric oxygen concentration." *Proceedings of the National Academy of Sciences* 103 (29) (July 18): 10861-10865. doi:10.1073/pnas.0604090103.
- Scott, Andrew C., and Timothy P. Jones. 1994. "The nature and influence of fire in Carboniferous ecosystems." *Palaeogeography, Palaeoclimatology, Palaeoecology* 106 (1-4) (January): 91–112. doi:10.1016/0031-0182(94)90005-1.
- Scott, Andrew C., Jenny Moore, and Barbara Brayshaw. 2000. "Introduction to fire and the palaeoenvironment." *Palaeogeography, Palaeoclimatology, Palaeoecology* 164 (1-4) (December): vii-xi. doi:10.1016/S0031-0182(00)00165-6.
- Scroxton, Nicholas, Sarah G. Bonham, Rosalind E. M. Rickaby, S. H. F. Lawrence, Michael Hermoso, and Alan M. Haywood. 2011. "Persistent El Niño–Southern Oscillation variation during the Pliocene Epoch." *Paleoceanography* 26 (2) (May): PA2215 (13 p.). doi:10.1029/2010PA002097.
- Seager, Richard, and Gabriel A. Vecchi. 2010. "Greenhouse warming and the 21st century hydroclimate of southwestern North America." *Proceedings of the National Academy of Sciences* 107 (50) (December 14): 21277 -21282. doi:10.1073/pnas.0910856107.
- Shapiro-Miller, Lauren B., Emily K. Heyerdahl, and Penelope Morgan. 2007. "Comparison of fire scars, fire atlases, and satellite data in the northwestern United States." *Canadian Journal of Forest Research* 37 (10) (October): 1933-1943. <http://www.treesearch.fs.fed.us/pubs/29499> doi:10.1139/X07-054.
- Sherriff, Rosemary L., and Thomas T. Veblen. 2007. "A spatially-explicit reconstruction of historical fire occurrence in the ponderosa pine zone of the Colorado Front Range." *Ecosystems* 10 (2) (March): 311-323. doi:10.1007/s10021-007-9022-2.
- Sherriff, Rosemary L., Thomas T. Veblen, and Jason S. Sibold. 2001. "Fire history in high elevation subalpine forests in the Colorado Front Range." *Ecoscience* 8 (3): 369–380.

Sherriff, Rosemary L., and Thomas T. Veblen. 2008. "Variability in fire-climate relationships in ponderosa pine forests in the Colorado Front Range." *International Journal of Wildland Fire* 17 (1) (February): 50-59. doi:10.1071/WF07029.

Sherwood, Owen A., Moritz F. Lehmann, Carsten J. Schubert, David B. Scott, and Matthew D. McCarthy. 2011. "Nutrient regime shift in the western North Atlantic indicated by compound-specific $\delta^{15}\text{N}$ of deep-sea gorgonian corals." *Proceedings of the National Academy of Sciences* 108 (3) (January 18): 1011-1015. doi:10.1073/pnas.1004904108.

Shindell, Drew T., Gavin A. Schmidt, Ron L. Miller, and Michael E. Mann. 2003. "Volcanic and solar forcing of climate change during the preindustrial era." *Journal of Climate* 16 (24) (December): 4094-4107.

Shinn, Dean Allison. 1977. Man and the land□: An ecological history of fire and grazing on eastern Oregon rangelands. M.A. Thesis, Corvallis, OR: Oregon State University.

<http://ir.library.oregonstate.edu/jspui/handle/1957/6737>

Shlisky, Ayn, Ane A. C. Alencar, María Manta Nolasco, and Lisa M. Curran. 2009. Overview: Global fire regime conditions, threats, and opportunities for fire management in the tropics (Chapter 3). In *Tropical Fire Ecology: Climate Change, Land Use, and Ecosystem Dynamics*, 65–83. 1st ed. Springer Praxis Books. UK: Springer (Jointly published with Praxis Publishing), May.

<http://www.springerlink.com/content/x824075qx34k7654/>

Shumway, Durland L., Marc D. Abrams, and Charles M. Ruffner. 2001. "A 400-year history of fire and oak recruitment in an old-growth oak forest in western Maryland, USA." *Canadian Journal of Forest Research* 31 (8) (August): 1437–1443. doi:10.1139/x01-079.

Sibold, Jason S., and Thomas T. Veblen. 2006. "Relationships of subalpine forest fires in the Colorado Front Range with interannual and multidecadal-scale climatic variation." *Journal of Biogeography* 33 (5) (May): 833-842. doi:10.1111/j.1365-2699.2006.01456.x.

Siccama, Thomas G. 1971. "Presettlement and present forest vegetation in northern Vermont with special reference to Chittenden County." *American Midland Naturalist* 85 (1) (January): 153–172. The University of Notre Dame.

Sierra, Carlos A., Mark E. Harmon, Enrique Thomann, Steven S. Perakis, and Hank W. Loescher. 2010. "Amplification and dampening of soil respiration by changes in temperature variability." *Biogeosciences Discussions* 7 (6) (December): 8979-9008. doi:10.5194/bgd-7-8979-2010.

Signell, Stephen A., Marc D. Abrams, Joseph C. Hovis, and Shannon W. Henry. 2005. "Impact of multiple fires on stand structure and tree regeneration in central Appalachian oak forests." *Forest Ecology and Management* 218 (1-3) (October 24): 146-158. doi:10.1016/j.foreco.2005.07.006.

Simard, A. J. 1991. "Fire severity, changing scales, and how things hang together." *International Journal of Wildland Fire* 1 (1): 23-34. doi:10.1071/WF9910023.

Simard, Albert J., Donald A. Haines, and William A. Main. 1985. "Relations between El Niño/Southern Oscillation anomalies and wildland fire activity in the United States." *Agricultural and Forest Meteorology* 36 (2) (December): 93–104. doi:10.1016/0168-1923(85)90001-2.

Skinner, Carl N., and Chiru Chang. 1996. Fire regimes, past and present (Chapter 38). In *Sierra Nevada Ecosystem Project: Final report to Congress. Vol. II. Assessments and Scientific Basis for Management Options*. Wildland Resources Center Report No. 37, 2:1041-1070. Davis, CA.: Centers for Water and Wildland Resources, University of California. <http://www.treesearch.fs.fed.us/pubs/36570>

Skinner, Walter R., Michael D. Flannigan, Brian J. Stocks, David L. Martell, B. Mike Wotton, J. Bernie Todd, John A. Mason, Kimberley A. Logan, and Erin M. Bosch. 2002. "A 500 hPa synoptic wildland fire climatology for large Canadian forest fires, 1959-1996." *Theoretical and Applied Climatology* 71 (3-4) (February): 157-169. doi:10.1007/s007040200002.

Smith, Joel B., and Stephanie S. Lenhart. 1996. "Climate change adaptation policy options." *Climate Research* 6 (2) (February): 193–201. doi:10.3354/cr0006193.

Smith, Mark Stafford, Lisa Horrocks, Alex Harvey, and Clive Hamilton. 2011. "Rethinking adaptation for a 4°C world." *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 369 (1934) (January 13): 196-216. doi:10.1098/rsta.2010.0277.

Smith, Susan J., and R. Scott Anderson. 1992. "Late Wisconsin paleoecologic record from Swamp Lake, Yosemite National Park, California." *Quaternary Research* 38 (1) (July): 91–102. doi:10.1016/0033-5894(92)90032-E.

Smithwick, Erica A. H., Anthony L. Westerling, Monica G. Turner, William H. Romme, and Michael G. Ryan. 2009. *Climate, fire and carbon: Tipping points and landscape vulnerability in the Greater Yellowstone Ecosystem*. JFSP(Joint Fire Science Program) Project: Fire Effects and Fire Ecology. University Park, PA: Pennsylvania State University (Sierra Nevada Research Institute and UC-Merced, University of Wisconsin, Colorado State University, USDA Forest Service RMRS), January. http://www.firescience.gov/JFSP_Search_Results_Detail.cfm?jdbid=%24%26Z%2B%3BV%40%20%20%A

Soja, Amber J., Nadezda M. Tchebakova, Nancy H.F. French, Michael D. Flannigan, Herman H. Shugart, Brian J. Stocks, Anatoly I. Sukhinin, E. I. Parfenova, F. Stuart Chapin III, and Paul W. Stackhouse, Jr. 2007. "Climate-induced boreal forest change: Predictions versus current observations." *Global and Planetary Change* 56 (3-4) (April): 274–296. doi:10.1016/j.gloplacha.2006.07.028.

Solomon, Susan, John S. Daniel, Ryan R. Neely III, Jean-Paul Vernier, Ellsworth G. Dutton, and Larry W. Thomason. 2011. "The persistently variable 'background' stratospheric aerosol layer and global climate change." *Science* 333 (6044) (August 12): 866-870. doi:10.1126/science.1206027.

Solomon, Susan, John S. Daniel, Todd J. Sanford, Daniel M. Murphy, Gian-Kasper Plattner, Reto Knutti, and Pierre Friedlingstein. 2010. "Persistence of climate changes due to a range of greenhouse gases." *Proceedings of the National Academy of Sciences* 107 (43) (October 26): 18354-18359. doi:10.1073/pnas.1006282107.

Solomon, Susan, Gian-Kasper Plattner, Reto Knutti, and Pierre Friedlingstein. 2009. "Irreversible climate change due to carbon dioxide emissions." *Proceedings of the National Academy of Sciences* 106 (6) (February 10): 1704-1709. doi:10.1073/pnas.0812721106.

Sommers, William T. 1978. "LMF forecast variables related to Santa Ana wind occurrences." *Monthly Weather Review* 106 (9) (September): 1307-1316.

- Sommers, William T. 2008. "The emergence of the wildland-urban interface concept." *Forest History Today*.
- . 2009. Climate change, forest disturbance and carbon retention. In , 10 p. Buenos Aires, Argentina, October 18. <http://www.fao.org/forestry/wfc/xiii/en/>
- Sommers, William T., Stanley Coloff, Susan G. Conard, and Josh McDaniel. 2010. "Fire history, fire regimes, and climate change – integrating information for management and planning." *Nature Precedings* (November). doi:10.1038/npre.2010.5238.1.
<http://precedings.nature.com/doifinder/10.1038/npre.2010.5238.1>
- Speed, James D. M., Gunnar Austrheim, Alison J. Hester, and Atle Mysterud. 2011. "Browsing interacts with climate to determine tree-ring increment." *Functional Ecology* Article first published online (July): 6 p. doi:10.1111/j.1365-2435.2011.01877.x.
- Spracklen, Dominick V., Loretta J. Mickley, Jennifer A. Logan, Rynda C. Hudman, Rosemarie Yevich, Michael D. Flannigan, and Anthony L. Westerling. 2009. "Impacts of climate change from 2000 to 2050 on wildfire activity and carbonaceous aerosol concentrations in the western United States." *Journal of Geophysical Research* 114 (20) (October): D20301 (17 p.). doi:10.1029/2008JD010966.
- Springer, Gregory S., D. Matthew White, Harold D. Rowe, Ben Hardt, L. Nivanthi Mihimdukulasooriya, Hai Cheng, and R. Lawrence Edwards. 2010. "Multiproxy evidence from caves of Native Americans altering the overlying landscape during the late Holocene of east-central North America." *The Holocene* 20 (2) (March): 275–283. doi:10.1177/0959683609350395.
- Stahle, David W., Jose Villanueva-Diaz, Dorian J. Burnette, Julian Cerano-Paredes, Richard R. Heim Jr., Falko K. Fye, Rodolfo Acuña-Soto, Matthew D. Therrell, Malcolm K. Cleaveland, and Daniel K. Stahle. 2011. "Major Mesoamerican droughts of the past millennium." *Geophysical Research Letters* 38 (5) (March): L05703 (4 p.). doi:201110.1029/2010GL046472.
- Stainforth, David A., Tolu Aina, Carl Christensen, Mat Collins, Nick Faull, Dave J. Frame, Jamie A. Kettleborough, et al. 2005. "Uncertainty in predictions of the climate response to rising levels of greenhouse gases." *Nature* 433 (7024) (January 27): 403–406. doi:10.1038/nature03301.
- Stambaugh, Michael C., Richard P. Guyette, Erin R. McMurry, and Daniel C. Dey. 2006. "Fire history at the eastern Great Plains margin, Missouri River Loess Hills." *Great Plains Research: A Journal of Natural and Social Sciences* 16 (2): 149–159.
- Stanturf, John A., Robert C. Kellison, F. S. Broerman, and Stephen B. Jones. 2003. "Productivity of southern pine plantations: Where are we and how did we get here?" *Journal of forestry* 101 (3) (May): 26–31.
- Starfield, Anthony M., and F. Stuart Chapín III. 1996. "Model of transient changes in Arctic and boreal vegetation in response to climate and land use change." *Ecological Applications* 6 (3) (August): 842–864. doi:doi:10.2307/2269489.
- Steffensen, Jørgen Peder, Katrine K. Andersen, Matthias Bigler, Henrik B. Clausen, Dorthe Dahl-Jensen, Hubertus Fischer, Kumiko Goto-Azuma, et al. 2008. "High-resolution Greenland ice core data show abrupt climate change happens in few years." *Science* 321 (5889) (August 1): 680-684. doi:10.1126/science.1157707.

- Stein, Karl, Axel Timmermann, and Niklas Schneider. 2011. "Phase Synchronization of the El Niño-Southern Oscillation with the Annual Cycle." *Physical Review Letters* 107 (September). doi:10.1103/PhysRevLett.107.128501. <http://link.aps.org/doi/10.1103/PhysRevLett.107.128501>
- Stein, Steven J. 1988. "Fire history of Paunsaugunt Plateau in southern Utah." *Western North American Naturalist* 48 (1): 58–63.
- Stenseth, Nils C., Atle Mysterud, Geir Ottersen, James W. Hurrell, Kung-Sik Chan, and Mauricio Lima. 2002. "Ecological effects of climate fluctuations." *Science* 297 (5585) (August 23): 1292-1296. doi:10.1126/science.1071281.
- Stephens, Scott L., Robert E. Martin, and Nicholas E. Clinton. 2007. "Prehistoric fire area and emissions from California's forests, woodlands, shrublands, and grasslands." *Forest Ecology and Management* 251 (3) (November 15): 205–216. doi:10.1016/j.foreco.2007.06.005.
- Stephens, Scott L., Constance I. Millar, and Brandon M. Collins. 2010. "Operational approaches to managing forests of the future in Mediterranean regions within a context of changing climates." *Environmental Research Letters* 5 (2) (June): 024003 (9 p.). doi:10.1088/1748-9326/5/2/024003.
- Stephens, Scott L. 2005. "Forest fire causes and extent on United States Forest Service lands." *International Journal of Wildland Fire* 14 (3) (September): 213-222. doi:10.1071/WF04006.
- Stephens, Scott L., and Lawrence W. Ruth. 2005. "Federal forest-fire policy in the United States." *Ecological Applications* 15 (2) (April): 532-542. doi:10.1890/04-0545.
- Stephens, Scott L., and Neil G. Sugihara. 2006. Fire management and policy since European settlement (Chapter 18). In *Fire in California's ecosystems*, 431–443. Berkeley, California: University of California Press, Berkeley. <http://nature.berkeley.edu/stephens-lab/Publications/Stephens%20Sug.%20AFE%20fire%20Book%20Policy%209-06.pdf>
- Stewart, Thomas R. 2000. Uncertainty, judgment, and error in prediction. In *Prediction: Science, decision making, and the future of nature*, 41-57. 1st ed. Washington, DC: Island Press. <http://www.albany.edu/cpr/stewart/Papers/StewartPrediction-2000cap.pdf>
- Steyaert, Louis T., and Robert G. Knox. 2008. "Reconstructed historical land cover and biophysical parameters for studies of land-atmosphere interactions within the eastern United States." *Journal of Geophysical Research* 113 (2) (January): D02101 (27 p.). doi:10.1029/2006JD008277.
- Stinchcomb, Gary E., Timothy C. Messner, Steven G. Driese, Lee C. Nordt, and R. Michael Stewart. 2011. "Pre-colonial (A.D. 1100-1600) sedimentation related to prehistoric maize agriculture and climate change in eastern North America." *Geology* 39 (4) (April): 363-366. doi:10.1130/G31596.1.
- Stine, Alexander R., Peter Huybers, and Inez Y. Fung. 2009. "Changes in the phase of the annual cycle of surface temperature." *Nature* 457 (7228) (January 22): 435-440. doi:10.1038/nature07675.
- Stocks, Brian J., John A. Mason, J. Bernie Todd, Erin M. Bosch, B. Michael Wotton, Brian D. Amiro, Michael D. Flannigan, et al. 2002. "Large forest fires in Canada, 1959–1997." *Journal of Geophysical Research* 107 (D1) (December): 8149 (12 p.). doi:10.1029/2001JD000484.
- Stoddard, Herbert L. 1935. "Use of controlled fire in southeastern upland game management." *Journal of Forestry* 33 (3) (March): 346–351.

- Storm, Linda, and Daniela Shebitz. 2006. "Evaluating the purpose, extent, and ecological restoration applications of indigenous burning practices in Southwestern." *Ecological Restoration* 24 (4) (December): 256–268. doi:10.3368/er.24.4.256.
- Stott, Peter A., Nathan P. Gillett, Gabriele C. Hegerl, David J. Karoly, Dáithí A. Stone, Xuebin Zhang, and Francis Zwiers. 2010. "Detection and attribution of climate change: A regional perspective." *Wiley Interdisciplinary Reviews: Climate Change* 1 (2) (April): 192–211. doi:10.1002/wcc.34.
- Stueve, Kirk M., Charles H. Perry, Mark D. Nelson, Sean P. Healey, Andrew D. Hill, Gretchen G. Moisen, Warren B. Cohen, Dale D. Gormanson, and Chengquan Huang. 2011. "Ecological importance of intermediate windstorms rivals large, infrequent disturbances in the northern Great Lakes." *Ecosphere* 2 (1) (January): Article 2 (21 p.). doi:10.1890/ES10-00062.1.
- Sugihara, Neil G., Jan W. van Wagtendonk, Kevin E. Shaffer, Jo Ann Fites-Kaufman, and Andrea E. Thode, eds. 2006. *Fire in California's ecosystems*. Berkeley, California: University of California Press, Berkeley. <http://www.ucpress.edu/book.php?isbn=9780520246058>
- Swain, Albert M. 1973. "A history of fire and vegetation in northeastern Minnesota as recorded in lake sediments." *Quaternary Research* 3 (3) (October): 383–390. doi:10.1016/0033-5894(73)90004-5.
- Swanson, Frederick J. 1981. Fire and geomorphic processes. In *Proceedings, Fire Regimes and Ecosystems Conference*, 401–420. Washington, D.C.: U.S. Department of Agriculture, Forest Service, Washington, D.C., General Technical Report WO-26. http://andrewsforest.oregonstate.edu/search>Show_Catalog_Item.cfm?Catalog_id=157&Catalog_type=Publication&topnav=82
- Swanson, Chris, Maria Janowiak, Louis Iverson, Linda Parker, David Mladenoff, Leslie Brandt, Patricia Butler, et al. 2011. *Ecosystem vulnerability assessment and synthesis: A report from the Climate Change Response Framework Project in northern Wisconsin*. General Technical Report. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station, June. <http://www.treesearch.fs.fed.us/pubs/38255>
- Swetnam, Thomas W., Christopher H. Baisan, Kiyomi Morino, and Anthony C. Caprio. 1998. *Fire history along elevational transects in the Sierra Nevada, California*. Final Report To Sierra Nevada Global Change Research Program. Tucson, AZ: Three Rivers, CA: Laboratory of Tree-Ring Research, The University of Arizona: Sequoia & Kings Canyon National Parks, National Park Service, November. <http://www.ltrr.arizona.edu/~tswetnam/tws-pdf/SierraNevadaTransects-FinalReport1998.pdf>
- Swetnam, Thomas W. 1993. "Fire history and climate change in giant sequoia groves." *Science* 262 (5135) (November 5): 885–889. doi:10.1126/science.262.5135.885.
- Swetnam, Thomas W., Craig D. Allen, and Julio L. Betancourt. 1999. "Applied historical ecology: Using the past to manage for the future." *Ecological Applications* 9 (4) (November): 1189–1206. doi:10.1890/1051-0761(1999)009[1189:AHEUTP]2.0.CO;2.
- Swetnam, Thomas W., and R. Scott Anderson. 2008. "Fire climatology in the western United States: Introduction to special issue." *International Journal of Wildland Fire* 17 (1) (February): 1–7. doi:10.1071/WF08016.
- Swetnam, Thomas W., Christopher H. Baisan, Anthony C. Caprio, Peter M. Brown, Ramzi Touchan, R. Scott Anderson, and Douglas J. Hallett. 2009. "Multi-millennial fire history of the Giant Forest, Sequoia

National Park, California, USA." *Fire Ecology* 5 (3) (December): 120-150.
doi:10.4996/fireecology.0503120.

Swetnam, Thomas W., and Christopher H. Baisan. 1996. Historical fire regime patterns in the southwestern United States since AD 1700. In *Proceedings Fire Effects in Southwestern Forests*, 11–32. General Technical Report RM-GTR-286. Fort Collins, CO: U.S. Department of Agriculture, Rocky Mountain Forest and Range Experiment Station.

http://www.fort.usgs.gov/Products/Publications/pub_abstract.asp?PubId=3199

—. 2003. Tree-ring reconstructions of fire and climate history in the Sierra Nevada and Southwestern United States (Chapter 6). In *Fire and Climatic Change in Temperate Ecosystems of the Western Americas*, 160:158-195. 1st ed. Ecological Studies. New York, NY: Springer-Verlag.

<http://www.springerlink.com/content/p430866050633485/>

Swetnam, Thomas W., and Julio L. Betancourt. 1998. "Mesoscale disturbance and ecological response to decadal climatic variability in the American Southwest." *Journal of Climate* 11 (12) (December): 3128-3147. doi:10.1175/1520-0442(1998)011<3128:MDAERT>2.0.CO;2.

Swetnam, Tyson L., and Peter M. Brown. 2010. "Comparing selected fire regime condition class (FRCC) and LANDFIRE vegetation model results with tree-ring data." *International Journal of Wildland Fire* 19 (1) (February): 1-13. doi:10.1071/WF08001.

Syphard, Alexandra D., Jon E. Keeley, and Teresa J. Brennan. 2011. "Comparing the role of fuel breaks across southern California national forests." *Forest Ecology and Management* 261 (11) (June 1): 2038-2048. doi:10.1016/j.foreco.2011.02.030.

Takle, Eugene S., Daniel J. Bramer, Warren E. Heilman, and Metinka R. Thompson. 1994. "A synoptic climatology for forest-fires in the NE US and future implications from GCM simulations." *International Journal of Wildland Fire* 4 (4) (January): 217-224. doi:10.1071/WF9940217.

Taylor, Alan H. 1995. "Forest expansion and climate change in the Mountain Hemlock (*Tsuga mertensiana*) Zone, Lassen Volcanic National Park, California, USA." *Arctic and Alpine Research* 27 (3) (August): 207–216.

—. 2000. "Fire regimes and forest changes in mid and upper montane forests of the southern Cascades, Lassen Volcanic National Park, California, USA." *Journal of Biogeography* 27 (1) (January): 87–104. doi:10.1046/j.1365-2699.2000.00353.x.

Taylor, Alan H., and Carl N. Skinner. 2003. "Spatial patterns and controls on historical fire regimes and forest structure in the Klamath Mountains." *Ecological Applications* 13 (3) (June): 704–719. doi:10.1890/1051-0761(2003)013[0704:SPACOH]2.0.CO;2.

Taylor, Alan H., and R. Matthew Beaty. 2005. "Climatic influences on fire regimes in the northern Sierra Nevada mountains, Lake Tahoe Basin, Nevada, USA." *Journal of Biogeography* 32 (3) (March): 425–438. doi:10.1111/j.1365-2699.2004.01208.x.

Taylor, Alan H., and Carl N. Skinner. 1998. "Fire history and landscape dynamics in a late-successional reserve, Klamath Mountains, California, USA." *Forest Ecology and Management* 111 (2-3) (December 7): 285–301. doi:10.1016/S0378-1127(98)00342-9.

Taylor, Alan H., Valérie Trouet, and Carl N. Skinner. 2008. "Climatic influences on fire regimes in montane forests of the southern Cascades, California, USA." *International Journal of Wildland Fire* 17 (1) (February): 60-71. doi:10.1071/WF07033.

Tebaldi, Claudia, and Reto Knutti. 2007. "The use of the multi-model ensemble in probabilistic climate projections." *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 365 (1857) (August 15): 2053-2075. doi:10.1098/rsta.2007.2076.

Thode, Andrea Elizabeth. 2005. Quantifying the fire regime attributes of severity and spatial complexity using field and imagery data. Ph.D. Dissertation, Davis, CA.: University of California, Davis.

<http://gradworks.umi.com/32/03/3203609.html>

Thomson, Allison M., Katherine V. Calvin, Steven J. Smith, G. Page Kyle, April Volke, Pralit Patel, Sabrina Delgado-Arias, et al. 2011. "RCP4.5: A pathway for stabilization of radiative forcing by 2100." *Climatic Change* Published online (July 29): 18 p. doi:10.1007/s10584-011-0151-4.

Thonicke, Kirsten, Sergey Venevsky, Stephen Sitch, and Wolfgang Cramer. 2001. "The role of fire disturbance for global vegetation dynamics: coupling fire into a Dynamic Global Vegetation Model." *Global Ecology and Biogeography* 10 (6) (November): 661–677. doi:10.1046/j.1466-822X.2001.00175.x.

Thorne, Peter W., John R. Lanzante, Thomas C. Peterson, Dian J. Seidel, and Keith P. Shine. 2011. "Tropospheric temperature trends: History of an ongoing controversy." *Wiley Interdisciplinary Reviews: Climate Change* 2 (1) (February): 66-88. doi:10.1002/wcc.80.

Thorntwaite, C. Warren. 1931. "The climates of North America: According to a new classification." *Geographical Review* 21 (4) (October): 633–655.

—. 1948. "An approach toward a rational classification of climate." *Geographical review* 38 (1) (January): 55–94.

Thuiller, Wilfried. 2007. "Biodiversity: Climate change and the ecologist." *Nature* 448 (7153) (August 2): 550–552. doi:10.1038/448550a.

Tibaldi, Stefano, and Franco Molteni. 1990. "On the operational predictability of blocking." *Tellus A* 42 (3) (May): 343-365. doi:10.1034/j.1600-0870.1990.t01-2-00003.x.

Timmermann, Axel, Josef Oberhuber, Andreas Bacher, Monika Esch, Mojib Latif, and Erich Roeckner. 1999. "Increased El Niño frequency in a climate model forced by future greenhouse warming." *Nature* 398 (6729) (April 22): 694–697. doi:10.1038/19505.

Tinner, Willy, Feng Sheng Hu, Ruth Beer, Petra Kaltenrieder, Brigitte Scheurer, and Urs Krähenbühl. 2006. "Postglacial vegetational and fire history: pollen, plant macrofossil and charcoal records from two Alaskan lakes." *Vegetation History and Archaeobotany* 15 (4) (September): 279-293. doi:10.1007/s00334-006-0052-z.

Tollefson, Jeff. 2011. "The 8,000-year-old climate puzzle." *Nature* Published online: Nature News (March 25). doi:10.1038/news.2011.184. <http://www.nature.com/doifinder/10.1038/news.2011.184>

Toney, Jaime L., and R. Scott Anderson. 2006. "A postglacial palaeoecological record from the San Juan Mountains of Colorado USA: Fire, climate and vegetation history." *The Holocene* 16 (4) (May): 505 -517. doi:10.1191/0959683606hl946rp.

Touchan, Ramzi, Craig D. Allen, and Thomas W. Swetnam. 1996. Fire history and climatic patterns in ponderosa pine and mixed-conifer forests of the Jemez Mountains, northern New Mexico. In *Fire effects in southwestern forests: Proceedings of the second La Mesa Fire symposium*, 33–46. General Technical Report RM-GTR-286. Fort Collins, CO: U.S. Department of Agriculture, Rocky Mountain Forest and Range Experiment Station, September.

http://www.fort.usgs.gov/Products/Publications/pub_abstract.asp?PubID=3677

Trenberth, Kevin E., and Timothy J. Hoar. 1997. "El Niño and climate change." *Geophysical Research Letters* 24 (23) (December): 3057–3060. doi:10.1029/97GL03092.

Trenberth, Kevin E. 1997. "The definition of El Niño." *Bulletin of the American Meteorological Society* 78 (12) (December): 2771–2777. doi:10.1175/1520-0477(1997)078<2771:TDOENO>2.0.CO;2.

Trewartha, Glenn T., Arthur H. Robinson, and Edwin H. Hammond. 1968. *Fundamentals of physical geography*. 2nd ed. McGraw-Hill Series in Geography. New York, Toronto, London: McGraw-Hill Education, December. <http://www.archive.org/details/fundamentalsofph032793mbp>

Trouet, Valerie, and Alan H. Taylor. 2010. "Multi-century variability in the Pacific North American circulation pattern reconstructed from tree rings." *Climate Dynamics* 35 (6) (November): 953–963. doi:10.1007/s00382-009-0605-9.

Trouet, Valérie, Jan Esper, Nicholas E. Graham, Andy Baker, James D. Scourse, and David C. Frank. 2009. "Persistent positive North Atlantic Oscillation mode dominated the Medieval Climate Anomaly." *Science* 324 (5923) (April 3): 78-80. doi:10.1126/science.1166349.

Trouet, Valérie, Alan H. Taylor, Andrew M. Carleton, and Carl N. Skinner. 2006. "Fire-climate interactions in forests of the American Pacific coast." *Geophysical Research Letters* 33 (18) (September): L18704 (5 p.). doi:10.1029/2006GL027502.

—. 2009. "Interannual variations in fire weather, fire extent, and synoptic-scale circulation patterns in northern California and Oregon." *Theoretical and Applied Climatology* 95 (3-4) (March): 349–360. doi:10.1007/s00704-008-0012-x.

Tudhope, Alexander W., Colin P. Chilcott, Malcolm T. McCulloch, Edward R. Cook, John Chappell, Robert M. Ellam, David W. Lea, Janice M. Lough, and Graham B. Shimmield. 2001. "Variability in the El Niño-Southern Oscillation through a glacial-interglacial cycle." *Science* 291 (5508) (February 23): 1511-1517. doi:10.1126/science.1057969.

Turetsky, Merritt R., Brian D. Amiro, Erin M. Bosch, and Jagtar S. Bhatti. 2004. "Historical burn area in western Canadian peatlands and its relationship to fire weather indices." *Global Biogeochemical Cycles* 18 (4) (November): GB4014 (9 p.). doi:10.1029/2004GB002222.

Turetsky, Merritt R., Evan S. Kane, Jennifer W. Harden, Roger D. Ottmar, Kristen L. Manies, Elizabeth Hoy, and Eric S. Kasischke. 2011. "Recent acceleration of biomass burning and carbon losses in Alaskan forests and peatlands." *Nature Geoscience* 4 (1) (January): 27–31. doi:10.1038/ngeo1027.

Turk, Judith K., and Robert C. Graham. 2009. "Soil carbon and nitrogen accumulation in a forested debris flow chronosequence, California." *Soil Science Society of America Journal* 73 (5) (October): 1504-1509. doi:10.2136/sssaj2008.0106.

Turk, Judith K., Brett R. Goforth, Robert C. Graham, and Katherine J. Kendrick. 2008. "Soil morphology of a debris flow chronosequence in a coniferous forest, southern California, USA." *Geoderma (A Global Journal of Soil Science)* 146 (1-2) (July 31): 157–165. doi:10.1016/j.geoderma.2008.05.012.

Turner II, Billie L., Roger E. Kasperson, Pamela A. Matson, James J. McCarthy, Robert W. Corell, Lindsey Christensen, Noelle Eckley, et al. 2003. "Science and technology for sustainable development special feature: A framework for vulnerability analysis in sustainability science." *Proceedings of the National Academy of Sciences* 100 (14) (July 8): 8074-8079. doi:10.1073/pnas.1231335100.

Turner, C.E., W.H. Romme, J. Chew, M.E. Miller, L.F.H. Leavesley, G.S. Miguel, N. Cobb, R. Zirbes, R. Viger, and K. Ironside. 2008. The FRAME Project-A collaborative modeling approach to natural resource management at Mesa Verde National Park. In *The Colorado Plateau III Integrating research and resources management for effective conservation*, 23-41. Tucson, AZ: University of Arizona Press.

Turner, David P., William D. Ritts, Zhiqiang Yang, Robert E. Kennedy, Warren B. Cohen, Maureen V. Duane, Peter E. Thornton, and Beverly E. Law. 2011. "Decadal trends in net ecosystem production and net ecosystem carbon balance for a regional socioecological system." *Forest Ecology and Management* 262 (7) (October 1): 1318-1325. doi:10.1016/j.foreco.2011.06.034.

Turner, Monica G. 2005. "Landscape ecology: What is the state of the science?" *Annual Review of Ecology, Evolution, and Systematics* 36 (1) (December): 319-344. doi:10.1146/annurev.ecolsys.36.102003.152614.

Turner, Monica G. 2010. "Disturbance and landscape dynamics in a changing world." *Ecology* 91 (10) (October): 2833-2849. doi:10.1890/10-0097.1.

Turner, Monica G., and William H. Romme. 1994. "Landscape dynamics in crown fire ecosystems." *Landscape Ecology* 9 (1) (March): 59-77. doi:10.1007/BF00135079.

Turner, Monica G., William W. Hargrove, Robert H. Gardner, and William H. Romme. 1994. "Effects of fire on landscape heterogeneity in Yellowstone National Park, Wyoming." *Journal of Vegetation Science* 5 (5) (October): 731-742. doi:10.2307/3235886.

Turner, Will R., Bethany A. Bradley, Lyndon D. Estes, David G. Hole, Michael Oppenheimer, and David S. Wilcove. 2010. "Climate change: Helping nature survive the human response." *Conservation Letters* 3 (5) (September): 304–312. doi:10.1111/j.1755-263X.2010.00128.x.

Umbanhowar Jr, Charles Edward. 1996. "Recent fire history of the northern Great Plains." *American Midland Naturalist* 135 (1) (January): 115–121.

Umbanhowar Jr., Charles E. 2004. "Interaction of fire, climate and vegetation change at a large landscape scale in the Big Woods of Minnesota, USA." *The Holocene* 14 (5) (July): 661-676. doi:10.1191/0959683604hl745rp.

Umbanhowar Jr., Charles E., Philip Camill, Christoph E. Geiss, and Rebecca Teed. 2006. "Asymmetric vegetation responses to mid-Holocene aridity at the prairie–forest ecotone in south-central Minnesota." *Quaternary Research* 66 (1) (July): 53–66. doi:10.1016/j.yqres.2006.03.005.

Urban, Dean L., Robert V. O'Neill, and Herman H. Shugart Jr. 1987. "Landscape ecology." *BioScience* 37 (2) (February): 119–127. doi:10.2307/1310366.

US CCSP, and Subcommittee on Global Change Research. 2008. *Synthesis and assessment product 3.3: Weather and climate extremes in a changing climate. Regions of focus: North America, Hawaii, Caribbean, and U.S. Pacific Islands*. Synthesis and Assessment Product. Final Report of Synthesis and Assessment Product. US Climate Change Science Program, June.

<http://www.climatescience.gov/Library/sap/sap3-3/final-report/default.htm>

US CCSP, Subcommittee on Global Change Research, Peter Backlund, Anthony Janetos, and David Schimel. 2008. *Synthesis and assessment product 4.3: The effects of climate change on agriculture, land resources, water resources, and biodiversity in the United States*. Synthesis and Assessment Product. Final Report of Synthesis and Assessment Product. US Climate Change Science Program, May.

<http://www.climatescience.gov/Library/sap/sap4-3/final-report/default.htm>

http://www.sap43.ucar.edu/documents/SAP_4.3_6.18.pdf

US CCSP, Subcommittee on Global Change Research, Daniel B. Fagre, Colleen W. Charles, Craig D. Allen, Charles Birkeland, F. Stuart Chapin III, et al. 2009. *Synthesis and assessment product 4.2: Thresholds of climate change in ecosystems*. Synthesis and Assessment Product. Final Report of Synthesis and Assessment Product. US Climate Change Science Program, January.

<http://www.climatescience.gov/Library/sap/sap4-2/final-report/default.htm>

US Department of Commerce, NOAA. 2010. Trends in Atmospheric Carbon Dioxide. Data. *Earth System Research Laboratory Global Monitoring Division*. <http://www.esrl.noaa.gov/gmd/ccgg/trends/>

US Government Accountability Office. 2007. *Climate change: Agencies should develop guidance for addressing the effects on federal land and water resources*. Report to Congressional Requesters. Washington, D.C.: U.S. Government Accountability Office (GAO), August.
<http://www.gao.gov/products/GAO-07-863>

———. 2011. *Climate Change - Improvements needed to clarify national priorities and better align them with federal funding decisions*. Washington, D.C.: U.S. Government Accountability Office (GAO), May. <http://www.gao.gov/products/GAO-11-317>. <http://www.gao.gov/new.items/d11317.pdf>

Vale, Thomas R. 1982. *Plants and people: Vegetation change in North America*. illustrated. Washington, DC: Association of American Geographers. <http://www.getcited.org/pub/102212082>

Vale, Thomas R., ed. 2002. *Fire, native peoples, and the natural landscape*. 1st ed. Washington, D.C.: Island Press, February. http://islandpress.org/bookstore/details5f0e.html?prod_id=928#toc

Vandenbroucke, Thijs R. A., Howard A. Armstrong, Mark Williams, Florentin Paris, Jan A. Zalasiewicz, Koen Sabbe, Jaak Nölvak, Thomas J. Challands, Jacques Verniers, and Thomas Servais. 2010. "Polar front shift and atmospheric CO₂ during the glacial maximum of the Early Paleozoic Icehouse." *Proceedings of the National Academy of Sciences* 107 (34) (August 24): 14983-14986. doi:10.1073/pnas.1003220107.

Vankat, John L. 1990. "A classification of the forest types of North America." *Vegetatio* 88 (1) (July): 53-66. doi:10.1007/BF00032602.

Vannière, Boris, Daniele Colombaroli, Emmanuel Chapron, Aurélie Leroux, Willy Tinner, and Michel Magny. 2008. "Climate versus human-driven fire regimes in Mediterranean landscapes: The Holocene record of Lago dell'Accesa (Tuscany, Italy)." *Quaternary Science Reviews* 27 (11-12) (June): 1181-1196. doi:10.1016/j.quascirev.2008.02.011.

Veblen, Thomas T., William L. Baker, Gloria Montenegro, and Thomas W. Swetnam, eds. 2003. *Fire and climatic change in temperate ecosystems of the western Americas*. 1st ed. Vol. 160. Ecological Studies. New York, NY: Springer Verlag. <http://www.springer.com/life+sciences/ecology/book/978-0-387-95455-4>

Veblen, Thomas T., Thomas Kitzberger, and Joseph Donnegan. 2000. "Climatic and human influences on fire regimes in ponderosa pine forests in the Colorado Front Range." *Ecological Applications* 10 (4) (August): 1178–1195. doi:10.1890/1051-0761(2000)010[1178:CAHIOF]2.0.CO;2.

Veblen, Thomas T., Thomas Kitzberger, Ricardo Villalba, and Joseph Donnegan. 1999. "Fire history in northern Patagonia: The roles of humans and climatic variation." *Ecological Monographs* 69 (1) (February): 47-67. doi:10.1890/0012-9615(1999)069[0047:FHINPT]2.0.CO;2.

Verdon, Danielle C., Anthony S. Kiem, and Stewart W. Franks. 2004. "Multi-decadal variability of forest fire risk—eastern Australia." *International Journal of Wildland Fire* 13 (2) (June): 165-171. doi:10.1071/WF03034.

Vinton, Mary Ann, David C. Hartnett, Elmer J. Finck, and John M. Briggs. 1993. "Interactive effects of fire, bison (*Bison bison*) grazing and plant community composition in tallgrass prairie." *American Midland Naturalist* 129 (1) (January): 10-18. doi:10.2307/2426430.

Visscher, Henk, Mark A. Sephton, and Cindy V. Looy. 2011. "Fungal virulence at the time of the end-Permian biosphere crisis?" *Geology* 39 (9) (September): 883-886. doi:10.1130/G32178.1.

Vitousek, Peter M., Harold A. Mooney, Jane Lubchenco, and Jerry M. Melillo. 1997. "Human domination of Earth's Ecosystems." *Science* 277 (5325) (July 25): 494 -499. doi:10.1126/science.277.5325.494.

Wade, Dale D., Brent L. Brock, Patrick H. Brose, James B. Grace, Greg A. Hoch, and William A. Patterson III. 2000. *Fire in eastern ecosystems (Chapter 4)*. General Technical Report. Wildland fire in ecosystems. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station., December. <http://www.treesearch.fs.fed.us/pubs/4554>

Wahl, Eugene R., and Carrie Morrill. 2010. "Toward understanding and predicting monsoon patterns." *Science* 328 (5977) (April 23): 437-438. doi:10.1126/science.1188926.

Waldrop, Thomas A., David L. White, and Steven M. Jones. 1992. "Fire regimes for pine-grassland communities in the southeastern United States." *Forest Ecology and Management* 47 (1-4) (January): 195-210. doi:10.1016/0378-1127(92)90274-D.

Walker, Donald A., Martha K. Raynolds, Fred J. A. Daniëls, Eythor Einarsson, Arve Elvebakk, William A. Gould, Adrian E. Katenin, et al. 2005. "The circumpolar Arctic vegetation map." *Journal of Vegetation Science* 16 (3) (June): 267-282. doi:10.1111/j.1654-1103.2005.tb02365.x.

Wallace, John M., and David S. Gutzler. 1981. "Teleconnections in the geopotential height field during the Northern Hemisphere winter." *Monthly Weather Review* 109 (4) (April): 784–812. doi:10.1175/1520-0493(1981)109<0784:TITGHF>2.0.CO;2.

Wang, Yonghe, and Kerry R. Anderson. 2010. "An evaluation of spatial and temporal patterns of lightning- and human-caused forest fires in Alberta, Canada, 1980–2007." *International Journal of Wildland Fire* 19 (8) (December): 1059–1072. doi:10.1071/WF09085.

Wang, Zhihui, Jerome Chappellaz, Key Hong Park, and John E. Mak. 2010. "Large variations in Southern Hemisphere biomass burning during the last 650 years." *Science* 330 (6011) (December 17): 1663-1666. doi:10.1126/science.1197257.

Ward, David J., Byron B. Lamont, and Chantal L. Burrows. 2001. "Grasstrees reveal contrasting fire regimes in eucalypt forest before and after European settlement of southwestern Australia." *Forest Ecology and Management* 150 (3) (September 15): 323-329. doi:10.1016/S0378-1127(00)00584-3.

Warren, Rachel. 2011. "The role of interactions in a world implementing adaptation and mitigation solutions to climate change." *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 369 (1934) (January 13): 217-241. doi:10.1098/rsta.2010.0271.

Weber, Michael G., and Michael D. Flannigan. 1997. "Canadian boreal forest ecosystem structure and function in a changing climate: Impact on fire regimes." *Environmental Reviews* 5 (3-4) (December): 145-166. doi:10.1139/a97-008.

Wells, Michael L., John F. O'Leary, Janet Franklin, Joel Michaelsen, and David E. McKinsey. 2004. "Variations in a regional fire regime related to vegetation type in San Diego County, California (USA)." *Landscape Ecology* 19 (2) (March): 139-152. doi:10.1023/B:LAND.0000021713.81489.a7.

Welp, Lisa R., Ralph F. Keeling, Harro A. J. Meijer, Alane F. Bollenbacher, Stephen C. Piper, Kei Yoshimura, Roger J. Francy, Colin E. Allison, and Martin Wahlen. 2011. "Interannual variability in the oxygen isotopes of atmospheric CO₂ driven by El Niño." *Nature* 477 (September 28): 579-582. doi:10.1038/nature10421.

Weltzin, Jake F., Michael E. Loik, Susanne Schwinning, David G. Williams, Philip A. Fay, Brent M. Haddad, John Harte, et al. 2003. "Assessing the response of terrestrial ecosystems to potential changes in precipitation." *BioScience* 53 (10) (October): 941-952. doi:10.1641/0006-3568(2003)053[0941:ATROTE]2.0.CO;2.

Weng, Chengyu, and Stephen T. Jackson. 1999. "Late Glacial and Holocene vegetation history and paleoclimate of the Kaibab Plateau, Arizona." *Palaeogeography, Palaeoclimatology, Palaeoecology* 153 (1-4) (September 15): 179-201. doi:10.1016/S0031-0182(99)00070-X.

van der Werf, Guido R., Jan Dempewolf, Simon N. Trigg, James T. Randerson, Prasad S. Kasibhatla, Louis Giglio, Daniel Murdiyarso, et al. 2008. "Climate regulation of fire emissions and deforestation in equatorial Asia." *Proceedings of the National Academy of Sciences* 105 (51) (December 23): 20350-20355. doi:10.1073/pnas.0803375105.

van der Werf, Guido R., James T. Randerson, Louis Giglio, G. James Collatz, Prasad S. Kasibhatla, and Avelino F. Arellano Jr. 2006. "Interannual variability of global biomass burning emissions from 1997 to 2004." *Atmospheric Chemistry and Physics* 6 (11) (August): 3423-3441. doi:10.5194/acp-6-3423-2006.

Werth, John, and Paul Werth. 1998. "Haines Index climatology for the western United States." *Fire Management Notes*.

West, Jordan M., Susan H. Julius, Peter Kareiva, Carolyn Enquist, Joshua J. Lawler, Brian Petersen, Ayana E. Johnson, and M. Rebecca Shaw. 2009. "U.S. natural resources and climate change: Concepts and approaches for management adaptation." *Environmental Management* 44 (6) (December): 1001-1021. doi:10.1007/s00267-009-9345-1.

- Westerling, Anthony L., and Benjamin P. Bryant. 2008. "Climate change and wildfire in California." *Climatic Change* 87 (S1) (March): 231-249. doi:10.1007/s10584-007-9363-z.
- Westerling, Anthony L., Alexander Gershunov, Timothy J. Brown, Daniel R. Cayan, and Michael D. Dettinger. 2003. "Climate and wildfire in the western United States." *Bulletin of the American Meteorological Society* 84 (5) (May): 595–604. doi:10.1175/BAMS-84-5-595.
- Westerling, Anthony L., Alexander Gershunov, Daniel R. Cayan, and Tim P. Barnett. 2002. "Long lead statistical forecasts of area burned in western U.S. wildfires by ecosystem province." *International Journal of Wildland Fire* 11 (4): 257-266. doi:10.1071/WF02009.
- Westerling, Anthony L., Monica G. Turner, Erica A. H. Smithwick, William H. Romme, and Michael G. Ryan. 2011. "Continued warming could transform Greater Yellowstone fire regimes by mid-21st century." *Proceedings of the National Academy of Sciences* 108 (32) (August 9): 13165-13170. doi:10.1073/pnas.1110199108.
- Westerling, Anthony L., Daniel R. Cayan, Timothy J. Brown, Beth L. Hall, and Laurence G. Riddle. 2004. "Climate, Santa Ana winds and autumn wildfires in Southern California." *EOS, Transactions American Geophysical Union* 85 (31) (August 3): 289, 296. doi:doi:10.1029/2004EO310001.
- Westerling, Anthony L., Hugo G. Hidalgo, Daniel R. Cayan, and Thomas W. Swetnam. 2006. "Warming and earlier spring increase western U.S. forest wildfire activity." *Science* 313 (5789) (August 18): 940-943. doi:10.1126/science.1128834.
- White, Mark A., and David J. Mladenoff. 1994. "Old-growth forest landscape transitions from pre-European settlement to present." *Landscape Ecology* 9 (3) (September): 191-205. doi:10.1007/BF00134747.
- Whiteside, Jessica H., Danielle S. Grogan, Paul E. Olsen, and Dennis V. Kent. 2011. "Climatically driven biogeographic provinces of Late Triassic tropical Pangea." *Proceedings of the National Academy of Sciences* 108 (22) (May 31): 8972-8977. doi:10.1073/pnas.1102473108.
- Whitlock, Cathy. 2004. "Land management: Forests, fires and climate." *Nature* 432 (7013) (November 4): 28-29. doi:10.1038/432028a.
- Whitlock, Cathy, and R. Scott Anderson. 2003. Fire history reconstructions based on sediment records from lakes and wetlands (Chapter 1). In *Fire and Climatic Change in Temperate Ecosystems of the Western Americas*, 160:3-31. 1st ed. Ecological Studies. New York, NY: Springer-Verlag.
<http://www.springerlink.com/content/l44r331p2768q320/>
- Whitlock, Cathy, and Patrick J. Bartlein. 2003. "Holocene fire activity as a record of past environmental change." *Developments in Quaternary Science* 1: 479-490. doi:10.1016/S1571-0866(03)01022-4.
- Whitlock, Cathy, and Chris Larsen. 2001. Charcoal as a fire proxy (Chapter 5). In *Tracking environmental change using lake sediments. Volume 3: Terrestrial, algal, and siliceous indicators*, 3:75–97. 1st ed. Developments in Paleoenvironmental Research, Vol. 3. New York, NY: Springer.
<http://www.springer.com/earth+sciences+and+geography/hydrogeology/book/978-1-4020-0681-4>
- Whitlock, Cathy, Philip E. Higuera, David B. McWethy, and Christy E. Briles. 2010. "Paleoecological perspectives on fire ecology: Revisiting the fire-regime concept." *The Open Ecology Journal* 3 (Special Issue #001): 6–23. doi:10.2174/1874213001003020006.

Whitlock, Cathy, Jennifer Marlon, Christy Briles, Andrea Brunelle, Long Colin, and Patrick Gonzalez. 2008. "Long-term relations among fire, fuel, and climate in the north-western US based on lake-sediment studies." *International Journal of Wildland Fire* 17 (1) (February): 72–83. doi:10.1071/WF07025.

Whitlock, Cathy, Patricio I. Moreno, and Patrick J. Bartlein. 2007. "Climatic controls of Holocene fire patterns in southern South America." *Quaternary Research* 68 (1) (July): 28–36. doi:10.1016/j.yqres.2007.01.012.

Whitlock, Cathy, Sarah L. Shafer, and Jennifer Marlon. 2003. "The role of climate and vegetation change in shaping past and future fire regimes in the northwestern US and the implications for ecosystem management." *Forest Ecology and Management* 178 (1-2) (June 3): 5-21. doi:10.1016/S0378-1127(03)00051-3.

Whitlock, Cathy, Carl N. Skinner, Patrick J. Bartlein, Thomas Minckley, and Jerry A. Mohr. 2004. "Comparison of charcoal and tree-ring records of recent fires in the eastern Klamath Mountains, California, USA." *Canadian Journal of Forest Research* 34 (10) (October): 2110–2121. doi:10.1139/X04-084.

Whitlock, Cathy, Willy Tinner, Louise Newman, and Thorsten Kiefer, eds. 2010. "Fire in the Earth System: A paleoperspective." *PAGES Newsletter* 18 (2) (August): 54-96. PAGES.

Whitney, Gordon G. 1987. "An ecological history of the Great Lakes forest of Michigan." *The Journal of Ecology* 75 (3) (September): 667–684.

—. 1996. *From coastal wilderness to fruited plain: A history of environmental change in temperate North America, 1500 to the present*. reprint, illustrated. Cambridge, United Kingdom: Cambridge University Press, September.

<http://assets.cambridge.org/assets/bookpageresult.jsf?conversationId=10557638>

Wiedinmyer, Christine, and Jason C. Neff. 2007. "Estimates of CO₂ from fires in the United States: Implications for carbon management." *Carbon Balance and Management* 2 (10) (November): 12 p. doi:10.1186/1750-0680-2-10.

Wiens, John A. 1989. "Spatial scaling in ecology." *Functional Ecology* 3 (4): 385–397. doi:10.2307/2389612.

Wignall, Paul B., Yadong Sun, David P. G. Bond, Gareth Izon, Robert J. Newton, Stéphanie Védrine, Mike Widdowson, et al. 2009. "Volcanism, mass extinction, and carbon isotope fluctuations in the Middle Permian of China." *Science* 324 (5931) (May 29): 1179-1182. doi:10.1126/science.1171956.

Willard, Debra A. 2006. Pollen records, postglacial | Southeastern North America. In *Encyclopedia of Quaternary Science*, 1:2752-2762. 1st ed. Amsterdam: Elsevier Science, November.

<http://www.sciencedirect.com/science/article/pii/B0444527478002040>

Williams, A. Park, Craig D. Allen, Constance I. Millar, Thomas W. Swetnam, Joel Michaelsen, Christopher J. Still, and Steven W. Leavitt. 2010. "Forest responses to increasing aridity and warmth in the southwestern United States." *Proceedings of the National Academy of Sciences* 107 (50) (December 14): 21289 -21294. doi:10.1073/pnas.0914211107.

Williams, Charles E. 1998. "History and status of Table Mountain pine- pitch pine forests of the southern Appalachian Mountains." *Natural Areas Journal* 18 (1) (January): 81–90.

Williams, Gerald W. 2005. References on the American Indian use of fire in ecosystems. USDA Forest Service, Washington, D.C., May. Virginia Department of Forestry.

<http://www.dof.virginia.gov/fire/prescribed-smoke-mgmt.shtml>

Williams, Gerald W. 2002. Aboriginal use of fire: Are there any “natural” plant communities? In *Wilderness and Political Ecology: Aboriginal Influences and the Original State of Nature*, 179–214. Salt Lake City, UT: University of Utah Press, September.

<http://westinstenv.org/histwl/2010/03/04/aboriginal-use-of-fire-are-there-any-%E2%80%9Cnatural%E2%80%9D-plant-communities/>

Williams, John W., Stephen T. Jackson, and John E. Kutzbach. 2007. “Projected distributions of novel and disappearing climates by 2100 AD.” *Proceedings of the National Academy of Sciences* 104 (14) (April 3): 5738 -5742. doi:10.1073/pnas.0606292104.

Williams, John W., Bryan N. Shuman, and Patrick J. Bartlein. 2009. “Rapid responses of the prairie-forest ecotone to early Holocene aridity in mid-continental North America.” *Global and Planetary Change* 66 (3-4) (April): 195–207. doi:10.1016/j.gloplacha.2008.10.012.

Williams, Michael. 2008. “A new look at global forest histories of land clearing.” *Annual Review of Environment and Resources* 33 (1) (November): 345–367.
doi:10.1146/annurev.environ.33.040307.093859.

Williams, Richard J., Garry D. Cook, A. Malcolm Gill, and Peter H. R. Moore. 1999. “Fire regime, fire intensity and tree survival in a tropical savanna in northern Australia.” *Australian Journal of Ecology* 24 (1) (February): 50–59. doi:10.1046/j.1442-9993.1999.00946.x.

Wolf, Joy. 2004. “A 200-year fire history in a remnant oak savanna in southeastern Wisconsin.” *The American Midland Naturalist* 152 (2) (October): 201-213. doi:10.1674/0003-0031(2004)152[0201:AYFHIA]2.0.CO;2.

Wolff, Christian, Gerald H. Haug, Axel Timmermann, Jaap S. Sininghe Damsté, Achim Brauer, Daniel M. Sigman, Mark A. Cane, and Dirk Verschuren. 2011. “Reduced interannual rainfall variability in East Africa during the last ice age.” *Science* 333 (6043) (August 5): 743-747. doi:10.1126/science.1203724.

Woodhouse, Connie A., David M. Meko, Glen M. MacDonald, Dave W. Stahle, and Edward R. Cook. 2010. “A 1,200-year perspective of 21st century drought in southwestern North America.” *Proceedings of the National Academy of Sciences* 107 (50) (December 14): 21283 -21288. doi:10.1073/pnas.0911197107.

Woodward, F. Ian, and A. D. Diamant. 1991. “Functional approaches to predicting the ecological effects of global change.” *Functional Ecology* 5 (2): 202-212. doi:10.2307/2389258.

Woodward, F. Ian, and B. G. Williams. 1987. “Climate and plant distribution at global and local scales.” *Vegetatio* 69 (1-3) (April 30): 189–197. doi:10.1007/BF00038700.

Wotton, B. Michael, and Michael D. Flannigan. 1993. “Length of the fire season in a changing climate.” *The Forestry Chronicle* 69 (2) (April): 187–192. doi:10.5558/tfc69187-2.

Wotton, B. Mike, Charles A. Nock, and Michael D. Flannigan. 2010. “Forest fire occurrence and climate change in Canada.” *International Journal of Wildland Fire* 19 (3) (May): 253-271. doi:10.1071/WF09002.

Wright Jr, Herbert E. 1970. Vegetational history of the Central Plains. In *Pleistocene and Recent Environments of the Central Great Plains*, 157–172. 1st ed. Department of Geology, University of Kansas. Special publication 3. Lawrence: University Press of Kansas.

<http://www.lib.muohio.edu/multifacet/record/mu3ugb1619026>

Wright, Henry A., and Arthur W. Bailey. 1982. *Fire ecology, United States and southern Canada*. 2nd ed. Indianapolis, IN: John Wiley & Sons Inc. <http://www.wiley.com/WileyCDA/WileyTitle/productCd-0471090336.html>

Xie, Shang-Ping, Clara Deser, Gabriel A. Vecchi, Jian Ma, Haiyan Teng, and Andrew T. Wittenberg. 2010. “Global warming pattern formation: Sea surface temperature and rainfall.” *Journal of Climate* 23 (4) (February): 966–986. doi:10.1175/2009JCLI3329.1.

Xoplaki, Elena, Dominik Fleitmann, Henry Diaz, Lucien von Gunten, and Thorsten Kiefer, eds. 2011. “Medieval Climate Anomaly.” *PAGES Newsletter* 19 (1) (March): 2-40. PAGES.

Xu, Liang, Arindam Samanta, Marcos H. Costa, Sangram Ganguly, Ramakrishna R. Nemani, and Ranga B. Myneni. 2011. “Widespread decline in greenness of Amazonian vegetation due to the 2010 drought.” *Geophysical Research Letters* 38 (7) (April): L07402 (4 p.). doi:10.1029/2011GL046824.

Yang, Jian, Hong S. He, and Eric J. Gustafson. 2004. “A hierarchical fire frequency model to simulate temporal patterns of fire regimes in LANDIS.” *Ecological Modelling* 180 (1) (December 10): 119–133. doi:10.1016/j.ecolmodel.2004.03.017.

Yarie, John. 1981. “Forest fire cycles and life tables: A case study from interior Alaska.” *Canadian Journal of Forest Research* 11 (3) (September): 554–562. doi:10.1139/x81-076.

Yocom, Larissa L., Peter Z. Fulé, Peter M. Brown, Julián Cerano, José Villanueva-Díaz, Donald A. Falk, and Eladio Cornejo-Oviedo. 2010. “El Niño–Southern Oscillation effect on a fire regime in northeastern Mexico has changed over time.” *Ecology* 91 (6) (June): 1660–1671. doi:10.1890/09-0845.1.

Young, James A., and Raymond A. Evans. 1981. “Demography and fire history of a western juniper stand.” *Journal of Range Management* 34 (6) (November): 501–506. doi:10.2307/3898108.

Yurganov, Leonid, Vadim Rakitin, Anatoliy Dzhola, Thomas August, Ekaterina Fokeeva, Gennadiy Gorchakov, Evgeniy Grechko, et al. 2011. “Satellite- and ground-based CO total column observations over 2010 Russian fires: Accuracy of top-down estimates based on thermal IR satellite data.” *Atmospheric Chemistry and Physics Discussions* 11 (4) (April): 12207–12250. doi:10.5194/acpd-11-12207-2011.

Zachos, James C., Gerald R. Dickens, and Richard E. Zeebe. 2008. “An early Cenozoic perspective on greenhouse warming and carbon-cycle dynamics.” *Nature* 451 (7176) (January 17): 279–283. doi:10.1038/nature06588.

Zachos, James, Mark Pagani, Lisa Sloan, Ellen Thomas, and Katharina Billups. 2001. “Trends, rhythms, and aberrations in global climate 65 Ma to present.” *Science* 292 (5517) (April 27): 686–693. doi:10.1126/science.1059412.

Zhao, Maosheng, and Steven W. Running. 2010. “Drought-induced reduction in global terrestrial net primary production from 2000 through 2009.” *Science* 329 (5994) (August 20): 940–943. doi:10.1126/science.1192666.

Ziska, Lewis, Kim Knowlton, Christine Rogers, Dan Dalan, Nicole Tierney, Mary Ann Elder, Warren Filley, et al. 2011. "Recent warming by latitude associated with increased length of ragweed pollen season in central North America." *Proceedings of the National Academy of Sciences* 108 (10) (March 8): 4248-4251. doi:10.1073/pnas.1014107108.