

Let's review **how to cite publications** in your papers and lab reports submitted for Jim's classes. This mini-guide is relevant for

- BIOL 5460 Plant Ecology
- BIOL 5465 Plant Ecology Lab
- BIOL 5470 Stable Isotope Biogeochemistry & Ecology
- BIOL 5475 Stable Isotope Lab
- BIOL 7465 IsoCamp

**All** references cited in papers and lab reports for these classes **MUST** be provided using the Ecology style format. At the course Canvas page, you have been provided with a PDF file describing how to cite different publication types using this citation format.

The purpose of this file is to quickly review several of the most common publications that you may be citing and to provide examples from a paper chosen at random from the journal Ecology.

In the Ecology style citation format, articles published in journals follow a very specific format as described in the PDF file you received and as shown below.

**1. → Journal article with one author ¶**

Last name, First initial. Second initial. Year published. Title. Journal title volume number:pages. ¶

***Example:*** ¶

Ehleringer, J.R. 1978. Implications of quantum yield differences on the distributions of C<sub>3</sub> and C<sub>4</sub> grasses. Oecologia 31:255-267. ¶

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**2. → Journal article with two or more authors ¶**

Last name, First initial. Second initial, First initial. Second initial. Last name, and First initial. Second initial. Last name. Year published. Title. Journal title volume number:pages. ¶

***Example:*** ¶

Cerling, T.E., L.K. Ayliffe, M.D. Dearing, J.R. Ehleringer, B.H. Passey, D.W. Podlesak, A.-M. Torregrossa, and A.G. West. 2007. Determining biological tissue turnover using stable isotopes: the reaction progress variable. Oecologia 151:175-189. ¶

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In the Ecology style citation format, articles published in books and chapters from books follow a very specific format as described in the PDF file you received and as shown below.

**3. → Chapter in a book ¶**

Last name, First initial. Second initial, First initial. Second initial. Last name, and First initial. Second initial. Year published. Chapter title, pages. In First initial. Second initial. Last name and First initial. Second initial. Last name. Book title. Publisher name, City of publication, State of publication. ¶

**Example:** ¶

Pataki, D.E., C.-T. Lai, C.D. Keeling, and J.R. Ehleringer. 2007. Insights from stable isotopes on the role of terrestrial ecosystems in the global carbon cycle, p. 37-44. In J. Canadell, D.E. Pataki, and L.F. Pitelka (editors). Terrestrial ecosystems in a changing world. Springer-Verlag, Berlin. ¶

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**4. → Book ¶**

Last name, First initial. Second initial, First initial. Last name, and First initial. Second initial. Last name. Year. Book title. Publisher, City of publication, State of publication, Country of publication. ¶

**Example:** ¶

Ehleringer, J.R., T.E. Cerling, and M.D. Dearing (editors). 2005. A history of atmospheric CO<sub>2</sub> and its effect on plants, animals, and ecosystems. Springer Verlag, New York. ¶

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Let's begin with a publication authored by Shelley Crausbay and colleagues that was published in the journal *Ecology* in 2017. An image of the first page of the article is shown below.

*Ecology*, 98(9), 2017, pp. 2356–2369  
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## Fire catalyzed rapid ecological change in lowland coniferous forests of the Pacific Northwest over the past 14,000 years

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**Abstract.** Disturbance can catalyze rapid ecological change by causing widespread mortality and initiating successional pathways, and during times of climate change, disturbance may contribute to ecosystem state changes by initiating a new successional pathway. In the Pacific Northwest of North America (PNW), disturbance by wildfires strongly shapes the composition and structure of lowland forests, but understanding the role of fire over periods of climate change is challenging, because fire-return intervals are long (e.g., millennia) and the coniferous trees dominating these forests can live for many centuries. We developed stand-scale paleorecords of vegetation and fire that span nearly the past 14,000 yr to study how fire was associated with state changes and rapid dynamics in forest vegetation at the stand scale (1–3 ha). We studied forest history with sediment cores from small hollow sites in the Marckworth State Forest, located ~1 km apart in the *Tsuga heterophylla* Zone in the Puget Lowland ecoregion of western Washington, USA. The median rate of change in pollen/spore assemblages was similar between sites (0.12 and 0.14% per year), but at both sites, rates of change increased significantly following fire events (ranging up to 1% per year, with a median of 0.28 and 0.38%,  $P < 0.003$ ). During times of low climate velocity, forest composition was resilient to fires, which initiated successional pathways leading back to the dominant vegetation type. In contrast, during times of high climate variability and velocity (e.g., the early Holocene) forests were not resilient to fires, which triggered large-scale state changes. These records provide clear evidence that disturbance, in the form of an individual fire event, can be an important catalyst for rapid state changes, accelerating vegetation shifts in response to large-scale climate change.

**Key words:** charcoal; fire history; fire regime; Pacific Northwest; paleoecology; pollen analysis; rapid ecological change; state change; *Tsuga heterophylla* Zone.

From the references section at the end of the Crausbay et al. publication, we that four journal publications and one government report have been cited as shown below.

journal  
publication



Brubaker, L. B. 1986. Responses of tree populations to climatic change. *Vegetatio* 67:119–130.

report



Brubaker, L. B. 1991. Climate change and the origin of old-growth Douglas-fir forests in the Puget Sound Lowland. Pages 17–24 in USDA Forest Service general technical report PNW-GTR-Pacific Northwest Research Station (USA).

journal  
publication



Bush, M. B. 2002. On the interpretation of fossil Poaceae pollen in the lowland humid neotropics. *Palaeogeography, Palaeoclimatology, Palaeoecology* 177:5–17.

journal  
publication



Calcote, R. 1998. Identifying forest stand types using pollen from forest hollows. *The Holocene* 8:423–432.

journal  
publication



Calder, W. J., D. Parker, C. J. Stopka, G. Jiménez-Moreno, and B. N. Shuman. 2015. Medieval warming initiated exceptionally large wildfire outbreaks in the Rocky Mountains. *Proceedings of the National Academy of Sciences* 112:13261–13266.

From the references section at the end of the Crausbay et al. publication, we that two journal publications and one website report have been cited as shown below.

journal  
publication



Cwynar, L. C. 1987. Fire and the forest history of the north cascade range. *Ecology* 68:791.

website



DellaSalla, D., G. Orians, K. Kavanagh, and M. Sims. 2001. Puget lowland forest (NA0524): World Wildlife Fund. [http://www.worldwildlife.org/wildworld/profiles/terrestrial/na/na0524\\_full.html](http://www.worldwildlife.org/wildworld/profiles/terrestrial/na/na0524_full.html), accessed March 2017.

journal  
publication



Dobrowski, S. Z., J. Abatzoglou, A. K. Swanson, J. A. Greenberg, A. R. Mynsberge, Z. A. Holden, and M. K. Schwartz. 2013. The climate velocity of the contiguous United States during the 20th century. *Global Change Biology* 19:241–251.

From the references section at the end of the Crausbay et al. publication, we that one book, one journal publication, and one book section have been cited as shown below.

book →

Franklin, J. F., and C. T. Dyrness. 1998. Natural vegetation of Oregon and Washington. Oregon State University Press, Corvallis, Oregon.

journal publication →

Franklin, J. F., et al. 2002. Disturbances and structural development of natural forest ecosystems with silvicultural implications, using Douglas-fir forests as an example. *Forest Ecology and Management* 155:399–423.

book section →

Gavin, G. D., and L. B. Brubaker. 2015. The Modern Landscape of the Olympic Peninsula. Pages 3–36 in D. G. Gavin and L. B. Brubaker editors. *Late Pleistocene and Holocene Environmental Change on the Olympic Peninsula, Washington*. Springer International Publishing, Cham.

If you still have questions on how to cite a publication, report, or website, first please review the PDF file provided to you on the Ecology citation formats to see if the answer to your question is provided there. If you still have a question, please do contact Jim Ehleringer or the class TA so that your question can be answered long before the assignment is due.