Paleofire: Data-Model Comparisons for the Past Millennium

A Global Paleofire Working Group (GPWG) Workshop
Harvard Forest - http://harvardforest.fas.harvard.edu/
324 North Main St., Petersham, Massachusetts, USA
September 29 - October 2, 2015

Overview:
The Global Palaeofire Working Group (GPWG) oversees the Global Charcoal Dataset (GCD), which was developed to facilitate research on fire in the Earth system. Our group provided the first reconstructions of global biomass burning on centennial to millennial time scales. As the database continues to grow, we are developing a new online interface to access the data, and more scientific analyses are becoming possible. This workshop will focus on comparing GCD analyses with output from global fire models of varying complexity, Earth system models with fire modules, and emissions models, and fire data from a variety of archives, including ice cores, fire scars, and historical records from the past millennium.

All research scientists with an interest in paleofire are invited to apply to attend. Previous workshops have resulted in collaborative papers in journals such as *Climate Dynamics*, *Nature Geoscience*, Global Biogeochemical Cycles, and the *Proceedings of the National Academy of Sciences*. The workshop is supported by the National Science Foundation (NSF) and by the international project Past Global Changes (PAGES).

To apply: Email jennifer.marlon@yale.edu with your name, position, affiliation and a short paragraph explaining why you would like to attend the workshop, what you hope to contribute to the efforts, and what you are most interested in studying. Please note whether you will need funding support to attend the workshop. **Deadline for applications is May 5, 2015.**

Tentative Schedule:
Mon., Sept. 28 / day 1: arrivals & dinner
Tues., Sept. 29 / day 2: overview & introductions, sub-groups formed
Wed., Sept. 30 / day 3: working group sessions, report-outs
Thurs., Oct. 1 / day 4: working group sessions, field trip

Fri., Oct. 2 / day 5: plenary discussion, future plans & next steps
Sat., Oct. 3 / day 6: departures

Workshop Objectives:
  (1) Review a) current data inventory (GCDv4 site lists and maps for past millennium, past 200 years, and past 50 years); b) current paleo capabilities of available fire models; and c) global and regional non-charcoal fire & emissions data > 50 years.
  (2) Present current tools for GCD analysis and gridded map-making
  (3) Use data-model comparisons to better understand variability in biomass burning during the past millennium
  (4) Test hypotheses about natural and human impacts on fire activity during the past millennium
  (5) Discuss the development of Fire-Human-Biosphere Interactions (Fire HuB)

Confirmed Participants:
Patrick Bartlein, University of Oregon, Eugene, Oregon, USA; Olivier Blarquez, University of Montréal, Montréal, Canada; Tim Brücher, Max Planck Institute for Meteorology, Hamburg, Germany; Daniele Colombaroli, University of Bern, Institute of Plant Sciences, Bern, Switzerland; Anne-Laure Daniau, CNRS, Bordeaux, France; Stijn Hantson, Institute for Meteorology and Climate Research, IMK-IFU/KIT, Garmisch-Partenkirchen, Germany; Jed Kaplan, IDYST - Faculté des Géosciences et de l'Environnement Université de Lausanne Géopolis, Lausanne, Switzerland; Ryan Kelly, Boston University, Massachusetts, USA; Silvia Kloster, Max Planck Institute for Meteorology, Hamburg, Germany; Brian Magi, University of North Carolina-Charlotte, North Carolina, USA; Jennifer Marlon, Yale University, New Haven, USA; Florent Mouillot, Institute of Research for Development, Centre of Functional and Evolutionary Ecology (CEFE), France; Mitchell Power, Utah University, Salt-Lake-City, USA; Sam Rabin, Princeton University, Princeton, New Jersey, USA, Carla Staver, Yale University, New Haven, USA; Boris Vannière, CNRS, Besançon, France

Limited financial support from PAGES is available to supplement participant travel – *particularly for Early Career scientists and researchers from less developed countries*. For questions please contact Jennifer Marlon (Jennifer.Marlon@yale.edu).