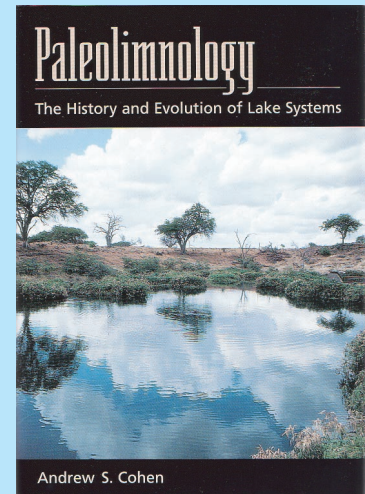


New on the PAGES bookshelf:

Paleolimnology - The History and Evolution of Lake Systems

Andrew S. Cohen, Professor of Geosciences, University of Arizona
 ISBN: 0-19-513353-6
 Publication date: 8 May 2003, Price: £74.50 (Hardback)
 OUP USA 528 pages, 204 line illus & 28 halftones,
<http://www.oup.co.uk/isbn/0-19-513353-6>

This text, written by a leading researcher in the field, describes the origin and formation of lakes in order to give context to the question of how lacustrine deposits form. It explains the process of sedimentation in lakes and the chemistry of those deposits and describes how the age of lake deposits is determined. Additionally, this book shows how different groups of fossils are used in interpreting the paleontological record of lakes. In order to illustrate the more synthetic approaches to interpreting the history of lakes, the author also discusses such special topics as lake-level history, lake evolution, and the impact of environmental change on lakes.



Marie Curie Incoming International Fellowships (IIF)

The European Commission's Sixth Framework Programme includes the introduction of Marie Curie Incoming International Fellowships. These Fellowships are available to fund top-class researchers from countries outside the 15 European Union Member and Associated States to support research visits of one to two years in a host research organization within one of the EU States. Support for fellows to return to their country of origin may be included for developing countries, emerging and transition economies. EUR11 million has been allocated to a 12 February 2004 deadline.

PAGES would be happy to act as host organization for a researcher interested in applying for a Fellowship to conduct research in Switzerland. Such a fellowship would be mutually beneficial and would enable you to take advantage of PAGES' international connections. We invite you to contact us with a short research proposal by 31 December 2003. Please note: You would need to apply for the Fellowship yourself but we could provide assistance, if necessary.

Further information about the Fellowship is available at:
http://fp6.cordis.lu/fp6/call_details.cfm?CALL_ID=30

Please send proposals to:
 Christoph Kull (kull@pages.unibe.ch)

HOLIVAR (Holocene Climate Variability)

RICK BATTARBEE

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HOLIVAR (<http://www.esf.org/holivar>) is an ESF scientific program in the life and environmental sciences. It seeks to bring together European scientists interested in climate variability over the Holocene period—broadly the last 11,500 years of Earth history. Scientists involved in the program are paleoclimatologists, climate histori-

ans and climate modelers, and the program aims to stimulate research on a number of key questions:

- How and why has climate varied naturally on different time-scales (annual, centennial and millennial) over the Holocene period?
- How can an understanding of past variability improve the performance of climate models, leading to an improved prediction of future climate change?
- How can climate models help to explain past climate change?

- How has climate variability and the nature of human society interacted during the Holocene?

Although these are questions of global relevance, HOLIVAR focuses mainly on research in Europe and Africa, and is allied closely to the aims and objectives of the Past Global Changes (PAGES) PEP-III project, which is concerned with climate change along a pole-to-pole transect through Europe and Africa. It is also a contribution to the PAGES/CLIVAR Intersection, which is a shared research agenda between WCRP and IGBP.

Scientific Rationale

The latest research on recent climate variability is tending increasingly to the view that greenhouse-gas forcing is becoming the dominant, though not the only, process driving global warming. Consequently, future climate change will be the result of interactions between the effects of human-induced changes and the effects of natural variability. There is therefore an urgent need to understand these interactions and to document and identify the characteristics of natural climate variability.

Natural variability, whether associated with mechanisms external or internal to the earth system, is expressed on inter-annual, decadal, and century time-scales, and it is variability on these time-scales that climate and earth system modelers are seeking to simulate. Data for only the most recent part of the historical record can be derived from instrumental measurements and, therefore, there is a need to extend the instrumental record backwards in time using proxy records of climate change contained in naturally occurring archives, such as lake and marine sediments, peat bogs, tree rings, speleothems, and ice cores.

However, none of these archives alone is adequate to capture the temporal- and spatial-scale variability needed for regional comparisons with climate model output. Consequently, the prime objectives of HOLIVAR are to encourage the

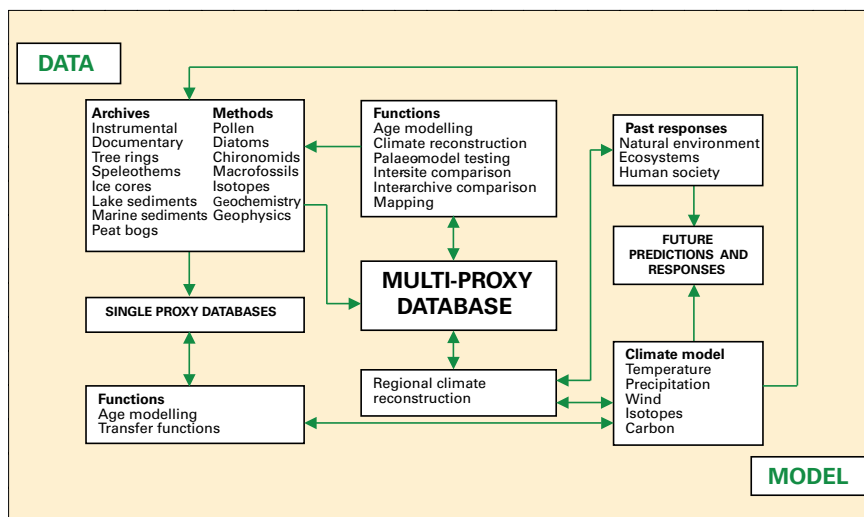


Figure 1: The HOLIVAR concept

harmonization of paleoclimate data from the different archives, to encourage the use of multi-proxy databases that can be used to combine data of different types at the regional scale, and to encourage and facilitate comparisons between data and model output (Fig. 1).

Work Timetable

The program objectives are being met over a five-year period (2001-2005) by a series of meetings, workshops, and training courses, which will culminate in an open science meeting in September 2005.

- 2001 International conference (co-sponsored by IGBP-PAGES) on "Past Climate Variability through Europe and Africa", Aix-en-Provence, France.
- 2002 Research workshop on "Combining proxies", Lammi, Finland.
- 2002 Research workshop on "Data-model comparisons", Louvain-la-Neuve, Belgium.
- 2003 Research workshop on "Holocene dating, chronologies, and age modelling", Utrecht, the Netherlands.
- 2003 Training course 1 on "Quantitative Holocene climate reconstruction and data-model comparisons", London, UK.
- 2004 Research workshop on "Databases and data analysis", Bremerhaven, Germany.
- 2004 Training course 2 on "Quantitative Holocene climate reconstruction and data-model comparisons", location to be decided.

- 2004 Research workshop on "Holocene climate forcing", Zurich, Switzerland.
- 2004 Research workshop on "Climate-human society interactions during the Holocene", location to be decided.
- 2006 Open Science Meeting on "Holocene climate variability", London, UK

Steering Committee and Funding

HOLIVAR is financed on an *à la carte* basis by ESF member organizations in Austria, Belgium, Finland, France, Germany, the Netherlands, Norway, Sweden, Switzerland, and the United Kingdom. The program steering committee meets annually and comprises:

Rick Battarbee, Chair (UK), André Berger (BE), Keith Briffa (UK), Françoise Gasse (FR), Eystein Jansen (NO), Ingemar Renberg (SE), Matti Saarnisto (FI), Christoph Spötl (AT), Jurg Beer (CH), Bas van Geel (NL), Dirk Verschuren (BE), Bernd Zolitschka (DE), Svenje Mehlert (ESF) and Joanne Dalton Goetz (ESF).

Further information is available on the program web site at (<http://www.esf.org/holivar>) or by contacting Joanne Dalton Goetz, ESF (jdalton@esf.org); Heather Binney, ECRC-UCL, UK (h.binney@ucl.ac.uk); or Rick Battarbee, ECRC-UCL, UK (r.battarbee@ucl.ac.uk).

