

iFAST: The International Forum on Advanced Environmental Sciences and Technology

A series of distinguished seminars by eminent scientists

8 a.m. CDT, 9 a.m. EDT, Wednesday, Sept. 23, 2026

1 p.m. GMT, 9 p.m. China, Wednesday, Sept. 23, 2026



JOHN SMOL
QUEEN'S UNIVERSITY
WWW.QUEENSU.CA/PEARL/

JOHN P. SMOL is a Distinguished University Professor in the Department of Biology at Queen's University, Ontario, where he also held the Canada Research Chair in Environmental Change for the maximum three seven-year terms (2001 – 2021). Smol founded and co-directs the Paleoeological Environmental Assessment and Research Lab, a group of ~30 students and other scientists dedicated to the study of long-term global environmental change, and especially as it relates to lake ecosystems. Smol has authored >780 journal publications and chapters since 1980, as well as completed 25 books. Much of his research deals with climatic change, acidification, eutrophication, contaminants and other environmental stressors. Smol was the founding editor of the *Journal of Paleolimnology* (1987-2007) and is current editor of *Environmental Reviews*. Since 1990 John has received seven honorary doctorates and has been awarded >100 research and teaching awards and fellowships, including the NSERC Herzberg Gold Medal as Canada's top scientist or engineer, the Vega Medal from the King of Sweden, the International Ecology Institute Prize, and The Mohn Prize from the Prime Minister of Norway. Among his 15 teaching and outreach awards, he was named a 3M Teaching Fellow and, following a nationwide search, *Nature* chose Smol as Canada's Top Mid-Career Science Mentor. He is an elected Fellow of the Royal Society of Canada, the Royal Society (London), and an International Member of the U.S. Academy of Sciences. He was elected president of the Academy of Science, Royal Society of Canada (2019-2022) and, in 2013, he was named an Officer of the Order of Canada.

Shifting Baselines and Moving Targets: Leveraging the Paleoeological Record to Track Seabird Population Changes Linked to Human and Natural Stressors

Abstract Long-term data are critical to contextualize wildlife population declines and to establish best management approaches. However, for most species, monitoring data are sparse or simply non-existent. The paleosciences have much to offer conservation biologists. In collaborations between ornithologists and other scientists, my lab has initiated studies where we use a broad spectrum of paleoenvironmental approaches to examine decadal, centennial and millennial-scale dynamics of vulnerable bird species. Paleolimnological techniques (i.e., using information preserved in lake sediments) have the potential to provide a long-term context for the size and persistence of seabird populations (and other animals), as well as their effects on local terrestrial environments, which can lead to more realistic conservation strategies.



DODGE FAMILY COLLEGE OF ARTS AND SCIENCES
INSTITUTE FOR ENVIRONMENTAL GENOMICS
The UNIVERSITY of OKLAHOMA



中南大學
CENTRAL SOUTH UNIVERSITY

Zoom webinar ID: 934 8142 2012 (zoom.us/j/93481422012)

More details and previous iFAST seminar videos are available on www.ou.edu/ieg/seminars.

Organizing Committee Chair: Jizhong Zhou (University of Oklahoma, USA; www.ou.edu/ieg)

Xueduan Liu, Huaqun Yin (Central South University, China)

The University of Oklahoma is an equal opportunity institution. www.ou.edu/eoo