

**Department of
Earth and
Environmental
Sciences
Seminar Series**



Refreshments
Provided

ALL WELCOME

**Dr. Michael Brookfield
School for the Environment
University of Massachusetts at
Boston**

***Holocene climate change and
the rise of Egyptian
civilization: Geological,
geomorphological and
archaeological evidence.***

The civilization of Egypt is not only a gift of the Nile, but the result of climatic changes over the Holocene interacting with developing human technology and societies. With the last retreat of the Northern hemisphere glaciers, wetter climates, comparable to those of the present Sudanian savannah, rapidly advanced north reaching the northern Sahara (over 15° of latitude) by 10,000 B.P. and where, between 10,000 and about 7,700 B.P., human societies developed from hunter gathering to multiresource pastoralism. From about 7,700 B.P. until 7,000 B.P., rapid climatic deterioration caused the progressive restriction of these pastoral societies from northern to southern Egypt (a distance of over 1,000 km) and by 5,000 B.P. such societies were practically limited to the northern Sudan. During this climatic deterioration, from about 7,000 B.P. to about 5,000 B.P., societies rapidly developed in technology and structure, in refuges like the Nile Valley, from multiresource pastoralism to complex pharaonic societies, aided by cultural immigration from the Middle East. Thus, it was that social complexity developed during climatic deterioration, and not during climatic optima. Unfortunately, numerical dating is still too imprecise to separate specific local from broader climatic and cultural changes. More precise numerical dating of well stratified sites, to within 100 years, or better one human generation (~20 years), are essential for relating cultural changes to environmental changes.

**THURSDAY, MARCH 6th
DC 1302 @ 2:30 p.m.**