

# GILBERT F. WHITE

## LECTURE IN THE GEOGRAPHICAL SCIENCES




WEDNESDAY, JANUARY 24, 2007

5:30 PM

KECK CENTER OF THE NATIONAL ACADEMIES

ROOM 100



HOSTED BY THE GEOGRAPHICAL SCIENCES COMMITTEE OF THE NATIONAL ACADEMIES IN TRIBUTE TO DR. GILBERT F. WHITE. THE AIM OF THE GILBERT F. WHITE LECTURE SERIES—DEVELOPED WITH HIS BLESSING—IS TO FOCUS ON CONNECTIONS BETWEEN THE GEOGRAPHICAL SCIENCES AND SOCIETY. IT WILL BOTH HONOR DR. WHITE AND ALSO USE HIS EXAMPLE AS AN INSPIRATION FOR GEOGRAPHERS TO SHARE THEIR WORK ON THE CONNECTIONS BETWEEN SCIENCE AND SOCIETY.

The Geographical Sciences Committee is a standing committee of the Board on Earth Sciences and Resources, a unit of The National Academies, which serves as an independent advisor to address critical national issues and give advice to the federal government and the public.

More information about the Geographical Sciences Committee can be found at <http://dels.nas.edu/besr/gsc.shtml>.

Funds for the event are provided by the National Science Foundation.

# GILBERT F. WHITE

1911-2006

GREAT ASPIRATIONS: LOCAL STUDIES, NATIONAL COMPARISONS, GLOBAL CHALLENGES

*By Dr. Robert Kates, Independent Scholar*

**G**ilbert White's seven decades of professional life were nurtured in Chicago, begun in Washington, practiced in Africa, Europe, and North America, and matured in Boulder, Colorado. Over time, he aspired to help address some of the great global challenges of nature and society, but in keeping with his essential humility, these aspirations grew slowly, encouraged by the expanding scale of his scientific research. Almost always they begin with local and place-based studies of what people actually do and think about in their use of the environment, adjustment to hazard, management of resources, and in their relationship with people and with nature. Then, always working with others, local studies can be compared and, if sufficient, merged into national assessments, and compared in turn with the experience of other nations. These, in turn become a major contribution of scientific research to what will have now become the global grand challenges of sustainable development.

To illustrate, I identify five of these great aspirations listed in chronological order dated by what appears to me to be their published beginning. These are:

- Bring potable water to all of the world's people as a human right
- Reduce significantly the global toll of hazard deaths and damages
- Facilitate peace in war ravaged or threatened regions through joint water development and management
- Make geography (in particular) and science (in general) more useful to the world
- Enable people to coexist with nature and develop sustainably

Not all of these follow the full evolution from local study to grand aspiration but all reflect this development. For each I briefly lay out the body of research and practice that is drawn upon, the main messages that emerge from these findings, the societal responses to them, and the current state of success in meeting the global challenges. I conclude with some thoughts on the meaning of this extraordinary life and work for each of us, for geographical science, and for the great global challenges.

RECEPTION TO FOLLOW OUTSIDE ROOM 100



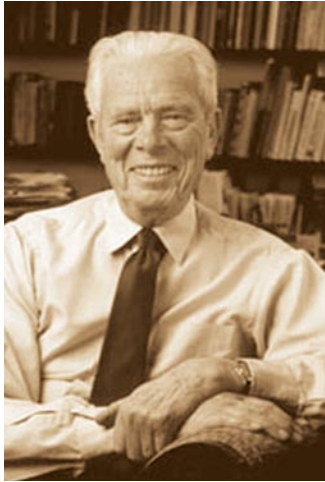
ROBERT KATES

Robert Kates, trained as a geographer at the University of Chicago, taught geography for many years at Clark University in Worcester, Massachusetts. He also participated in interdisciplinary programs addressing both environment and development at the University of Dar es Salaam in Tanzania, Clark University, and at the World Hunger Program at Brown University in Providence, Rhode Island. Dr. Kates now serves as a Senior Associate at Harvard University, where he is also co-convenor of the Steering Group for the Initiative on Science and Technology for Sustainability.

His current research is on long-term trends and values, attitudes, and beliefs affecting a sustainability transition. He chaired the Coordinating Committee on a Transition Toward Sustainability following the National Academy of Sciences' report, *Our Common Journey: A Transition Toward Sustainability*. Recent publications include *What Is Sustainable Development? Goals, Indicators, Values, and Practice* (Kates et al., 2005) and *Do Global Attitudes and Behaviors Support Sustainable Development?* (Leiserowitz, Kates and Parris, 2005). Following the devastation of New Orleans after Hurricane Katrina, Dr. Kates returned to his earlier work on hazards and published a research perspective on the reconstruction of New Orleans (Kates, Colten, Laska, and Leatherman, 2006).

Dr. Kates' most recent books include the co-authorship of *Great Transition: The Promise and Lure of the Times Ahead* (2002), and, with the Association of American Geographers' Global Change in Local Places Research Group, *Global Change in Local Places: Estimating, Understanding, and Reducing Greenhouse Gases* (2003).

Dr. Kates is a member of the National Academy of Sciences and the American Academy of Arts and Sciences, and in 1991 he was awarded the National Medal of Science for his work on hunger, environment, and natural hazards. He now lives and continues to work as an independent scholar in Maine.



GILBERT WHITE

Gilbert F. White's approach to natural hazards research centered on the notion that humans should adjust to their environment rather than relying on engineering solutions. "Floods are 'acts of god,' but flood losses are largely acts of man," he stated in his doctoral dissertation from the University of Chicago. He coupled this approach with a lifelong commitment to improving human welfare through social policy.

After receiving his doctorate in 1934, Dr. White moved to Washington, D.C. to serve on the Mississippi Valley Commission in the Roosevelt administration. During his eight years in Washington, he also worked for the National Resources Commission and the Bureau of the Budget. From 1942, Dr. White served with the American Friends Service Committee in France, Germany, and the United States. Then, in 1946, at age 35, he became president of Haverford College, Pennsylvania. Nine years later he returned to the University of Chicago as a professor and chair of the geography department. In 1970, he moved to the University of Colorado at Boulder, where he was professor of geography, director of the Institute of Behavioral Science, and founder of the Natural Hazards Research Center.

Dr. White was president of the Association of American Geographers (1961-62) and the International Council of Scientific Unions (1976-82). Among his many other commitments, he chaired National Research Council and International Geographical Union activities, was a member of the Federal Emergency Management Agency Steering Committee for Evaluation of the National Flood Program, and was executive editor of *Environment* magazine.

The many awards given to Dr. White for his distinguished career include the Association of American Geographers Lifetime Achievement Award, the National Academy of Sciences Public Welfare Medal, and the National Medal of Science. He was a member of the National Academy of Sciences, American Academy of Arts and Sciences, American Philosophical Society, and Russian Academy of Sciences.

#### SOURCES:

University of Colorado at Boulder Natural Hazards Research Center [<http://www.colorado.edu/hazards/gfw/>]; Association of American Geographers.

## ABOUT THE GEOGRAPHICAL SCIENCES COMMITTEE

The Geographical Sciences Committee (GSC) provides high-quality scientific, technical, and policy advice and recommendations to society and to government at all levels using the methods of spatial analysis and representation. The geographical sciences focus on understanding responses to the impacts of changing biophysical and human environments. Place-based responses in domains ranging from health to urbanization, hazards to migration, can be characterized in terms of vulnerability, resiliency, adaptation, and sustainability. The GSC addresses the geographic dimensions of human-environment interactions, spatial location and concentration, and place-based research and policy at all spatial scales.

The GSC fosters international cooperation by serving as a liaison to other national geographical organizations and initiates collaborative research programs among those organizations. It provides advice to The National Academies on all matters pertaining to geographical science, especially to the NAS Foreign Secretary on matters concerning international organizations, programs, and research. It serves as the official U.S. liaison to the International Geographical Union (IGU), and promotes and facilitates participation of U.S. geographers in the IGU.

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*Photos of Gilbert White courtesy of the University of Colorado at Boulder*

