

Gilbert F. White, 94, Geographer, Environmentalist, and Pioneer in Flood Plain Management and Natural Disaster Research, Dies

Gilbert F. White, a geographer known as the father of flood plain management and a leader in natural hazards research and the world environmental movement, died on October 5, 2006, at his home in Boulder, Colorado. He was 94. He had been in declining health for the past year.

White was Gustavson Distinguished Professor Emeritus of Geography at the University of Colorado at Boulder, a position he held since 1980. Prior to that, from 1970 to 1978, he was Professor of Geography and the Director of the Institute of Behavioral Science at the university. He founded and directed the university's Natural Hazards Research and Applications Information Center from 1976 to 1984 and served as director again from 1992-1994. In May 2006 he received an honorary degree from CU.

White's landmark work, beginning with his 1942 University of Chicago doctoral dissertation "Human Adjustment to Floods," challenged the notion that natural hazards are best addressed by engineering solutions. Instead, he argued that the havoc wrought by floods and other natural disasters as earthquakes and hurricanes may be better avoided by modifying human behavior to reduce potential harm. "Floods are 'acts of god,' but flood losses are largely acts of man," he wrote in his thesis. He advocated, where feasible, adaptation to or accommodation of flood hazards rather than the "structural" solutions (dams and levees, for example) that dominated policy in the early 20th century.

After his first study of the Boulder Creek floodplain published in 1957, White was commissioned in 1969 by the Boulder City Council and County Commissioners to prepare a report on possible zoning of floodplains in Boulder. This led to enactment of the first floodplain zoning in 1970. White was twice the recipient of the Outstanding Achievement Award from Plan Boulder County, once jointly with his first wife Anne U. White. In 1994 Gilbert White created the Boulder Creek Flood Notebook, an on-line plan for studying the next great flood to strike Boulder, both the effects of such a catastrophe and the decisions that made it possible, contributing funds to support the research on a flood that he did not live to see. White continued to be active in local issues of urban growth, making his last presentation to City Council in 2002 and providing guidance on floodplain issues up until a few months of his death.

The underlying notion that humans should adjust to their environment, coupled with a deep commitment to improving human welfare through social policy, guided White's career. A quiet leader, his work encompassed not only floods and other natural hazards, but water management in developing countries, global environmental change, geographic education, and international cooperation on water systems, including in the Middle East and the Mekong and Nile river basins.

"No mere ivory tower geographer, he helped establish the fields of natural hazards research and resource management that become so crucial to modern environmental planning and policymaking" said Gilbert M. Grosvenor, Chairman of the National Geographic Society, when he presented the Society's highest honor, the Hubbard Medal, to White in 1994.

While White's ideas were initially greeted with controversy, he was a persistent advocate. After six decades, his proposals for flood plan management and flood insurance reform have won widespread acceptance. "Every person who buys flood insurance, or is asked to relocate out of a floodplain... has been touched by Gilbert White's life in a very real way" said JoAnn Howard, former Administrator of the National Flood Insurance Program.

A key part of White's successes was his talent for working with people. In a recent biography of White, *Living with Nature's Extremes*, Robert Hinshaw writes "Gilbert White's long career in shepherding natural resources has involved not only the study of resource issues but also a distinctive ability to establish and strengthen communication and cooperation across contentious boundaries." A source of pleasure for White late in life was that in 2001, the U.S. Corps of Engineers established a special collection to house his papers.

A native of Hyde Park in Chicago, White received a BS in 1932, MS in 1934, and PhD in 1942 in geography from the University of Chicago. In 1934 he interrupted his doctoral studies to join the New Deal administration of Franklin Roosevelt. He planned a one year stint in Washington as a staffer on the Mississippi Valley Commission, but stayed eight years to work for the National Resources Commission and later the Bureau of the Budget.

Strongly attracted by the tenants of the Society of Friends since his student days, White espoused pacifism and became a Quaker at the outbreak of World War II. In 1942 he went to France to do relief work with the American Friends Committee (AFSC). He was taken prisoner of war the following year and interned in Germany. After being exchanged in 1944, he returned to become Assistant Executive Secretary of the AFSC. In 1944 he married Anne Elizabeth Underwood, who worked with him on many research projects, including a pioneering study of domestic water use in East Africa. The Whites were committed to preserving open space in Boulder County, Anne serving on the Boulder County Parks and Open Space Advisory Committee, and working with Gilbert to donate land that was integral to establishing the Anne U. White trail in upper Fourmile Creek Canyon shortly before she died in 1989.

In 1946, White accepted the presidency of Haverford College, where he became the youngest college president in the country. In 1955, he returned to the University of Chicago to become a professor and chair of the geography department. He brought his family to spend the summers in Sunshine Canyon starting in 1957, first on the Wittemeyer Ranch and then later on property they purchased up Sunshine Canyon.

Gilbert and Anne White moved permanently to Sunshine Canyon when he took a post at the University of Colorado in 1970, moving to a condominium building on Pearl Street which they planned jointly with several other retiring faculty in 1983.

Reflecting his commitment to national and international cooperation, White served on numerous professional and scientific committees and advisory groups for organizations such as the National Research Council, the UN and UNESCO. Among the many posts he held, White was President of the Association of American Geographers 1961-62, Chair of its High School Geography Project, Chairman of the Board of Resources for the Future 1974-79, and President of the International Council of Scientific Unions 1976-82. He served as Chairman of the American Friends Service Committee 1963-69.

White officially retired in 1980, but remained professionally active, serving as Executive Editor of *Environment* magazine from 1983 to 1992, Chair of the Committee on Sustainable Water Supplies for the Middle East, National Research Council, 1996-1999, and since 2001 as a member of the FEMA Steering Committee for Evaluation of the National Flood Program.

Among numerous awards, White won the Association of American Geographers' Lifetime Achievement Award in 2002 and in 2000 received the nation's highest scientific honor, the National Medal of Science, and the National Academy of Sciences' highest honor, the Public Welfare Medal. Other awards and honors included the 2006 UNESCO-GARD leadership award in disaster reduction, the 1995 Volvo Environmental prize, the 1987 Tyler Prize for Environmental Achievement, and eight honorary degrees. He was member of the National Academy of Sciences, the American Academy of Arts and Sciences, the American Philosophical Society, the Russian Academy of Sciences, and the Cosmos Club.

White is survived by his second wife and long time friend, Claire Sheridan of Boulder, his children William White of Ithaca, New York, Mary White of Boulder, Colorado, and Frances Chapin of Edmonds, Washington, stepchildren Monika Proffitt of Seattle and Daniel Proffitt of Boulder, Colorado, and four grand children. A memorial service will be held at 1:00 pm at Spice of Life Events Center 5706 Arapahoe Avenue, Boulder, Colorado on November 11. Donations may be made to the CU Foundation: Gilbert F. White Graduate Fellowship Endowment, care of Diane Smith, Natural Hazards Center, 482 UCB, University of Colorado, Boulder CO 80309-0482. Alternatively, contributions can also be made to the Gilbert White Fellowships, Resources for the Future, 1616 P Street NW, Washington, DC 20036.