



Arthur L. Bloom

September 2, 1928 – May 31, 2017

Arthur L. Bloom, Professor Emeritus of Geological Sciences (now Earth and Atmospheric Sciences), passed away on May 31, 2017 in Ithaca, New York in his 89th year.

Professor Arthur Bloom grew up on a small farm in Wisconsin where he developed a lifelong love of land forms, plants, and gardening. In 1950, he received his B.A. degree with honors in geology from Miami University of Ohio. A Fulbright Award led to his M.A. degree in geology from Victoria University, New Zealand under the supervision of the distinguished geomorphologist, Sir Charles Cotton.

His four years of commissioned service in the amphibious forces of the U.S. Navy's Pacific Fleet from 1952 to 1956 instilled a lasting love of the Pacific Islands which would later result in some of his most widely lauded scientific contributions. In 1959, studying the Quaternary geology of southwestern Maine, he completed his Ph.D. from Yale University, working under Richard Foster Flint, one of the foremost Quaternary geologists of his day. Art joined the Cornell faculty as an Assistant Professor in 1960, was promoted to Associate Professor in 1965, and achieved the rank of Full Professor in 1976. He became Professor Emeritus in 1996, but remained active in the department.

Art's service to Cornell University spanned a critical time in the study of the Earth — from the age of geosynclines through the birth and maturation of Plate Tectonics to the time of increasing interest in global change. During this same time, geological sciences at Cornell transitioned from the College of Arts and Sciences to the College of Engineering to a department jointly shared by Engineering and the College of Agriculture and Life Sciences. Art was the only faculty member to experience all three transitions. For fifty years, he was the campus expert for local bedrock

and surficial geology of the Finger Lakes region, sharing his knowledge not only with his department colleagues but also with many from the broader Cornell and Ithaca communities. Art engaged in cross-university collaborations before they became fashionable, and many a generation of planetary scientists took his geomorphology courses. He coauthored papers on Mars and Phobos with several of them. Soil scientists, archeologists, and others were also frequent attendees at his lectures. His first love, though, was always tectonic geomorphology, coast lines, and, in particular, sea level change, a topic that has acquired profound importance in the last few decades.

Seminal work by Art, his students and colleagues during the 1970s documented the last 125,000 years of sea level using the study of uplifted coral reefs in Papua New Guinea and other islands in the Southwest Pacific. That work, which has garnered thousands of citations, provides the baseline for assessing modern, and predicted future, sea level rise. For ten years, from 1972-1982, Art chaired a multinational UNESCO-sponsored project with participants from 38 countries to study Quaternary sea level change. Those efforts led to long lasting collaborations and friendships with colleagues in Japan, China, and South Korea.

In the decade of the 1980s, he expanded his interests to the opposite side of the Pacific where he, and his students, documented coastal terraces and alluvial systems related to the development of the Central Andes. He embraced emerging satellite-based observation of the Earth and was a coinvestigator on the NASA shuttle radar imaging projects and the NASA Earth Observing System.

Recognition of Professor Bloom's accomplishments were many: from membership in Phi Beta Kappa and Sigma Xi to fellowship in the American Association for the Advancement of Science and the Geological Society of America. He was a Senior Fulbright Research Scholar in Australia and a research fellow in Japan and South Korea. At Cornell he served on the Cornell Plantations Advisory Committee for many years and won two teaching awards from the College of Engineering.

Art shared his comprehensive knowledge of the earth's surface via his text book *Geomorphology: A Systematic Analysis of Late Cenozoic Landforms*. This text, a significant expansion of his earlier book *The Surface of the Earth*, set the standard for geomorphology textbooks for decades. *Geomorphology*...has been called the last comprehensive geomorphology textbook as subsequent works have focused on thematic or environment-specific subsets of the discipline. At the time of his passing, he was collaborating with department colleagues on a new summary of the geology and glacial history of the Finger Lakes region.

Professors and students will remember Art as an inspiring colleague, ferociously effective editor, and someone who reminded us of how we fit into the greater Cornell University community. His good spirits could enliven a dull meeting or defuse a tense situation. He was a friend and mentor to both students and staff. We will all miss him. In 2014, an endowment, the *Arthur L. Bloom Fund for Geological Sciences Research and Education in the Pacific Region*, was established in his name by a generous benefactor.

Arthur Bloom is survived by his wife Donna, their three sons, Jay, Jeff, and Eric, and their seven grandchildren.

Written by Rick Allmendinger (Chair) and Matthew Pritchard