The year 1974-75 was an eventful one for the Pomona College Geology Department. The Seaver Foundation, which supports the Pomona science departments and the Computer Center, provides extra funds for special equipment. A grant of $16,600 from the National Science Foundation, added to Seaver funds, has provided some $70,000 for the purchase of a scanning electron microscope with a computerized X-ray detection system. This versatile equipment discloses the three-dimensional appearance of the most minute micro-organisms and takes the place of an electron probe in microchemistry.

Gifts from the Travel Film Series, Mt. Baldy Council of Pomona College Women's Campus Club, and from the Seavers have permitted us to expand our seismographic instrumentation to three instruments: vertical, east-west, and north-south. The addition of a crystal-controlled clock, synchronized with government time signals, now permits highly accurate timing of seismic events. Our station is now recognized in print: we cooperated with Cal Tech in a local crustal-structure study using recordings from a blast in a quarry near Corona. We continue to maintain a strong-motion accelerograph in Seaver Lab, but (fortunately!) it has yet to be triggered.

We have had our part in the spectacular, turbulent development of environmental geology in California. The basal facts are the state coastline, seismic hazard, and health laws. Claremont struggled with the required seismic hazard ordinances for more than a year. On our advice, no special safeguards are specified for the vicinity of supposed fault lines, such as the one that parallels Foothill Boulevard. This recommendation was made because the faults cannot be accurately located, because they show no evidence of recent movement, and because the chances are high that future ruptures would be along new planes in the alluvium. In June 1975 a State Board decided that the nitrate nitrogen in Claremont well water must be reduced from the prevalent 90 to 120 parts per million. A 1914 Pomona College MS thesis shows that total nitrogen in Claremont wells during the 1912-1913 season ranged from 4 to 8 ppm. The idea of an expensive treatment plant has now been abandoned in favor of mixing well water with imported water year by year, hoping that a few very rainy years will reduce nitrate (probably from excessive fertilization of citrus groves that are now gone) to passable levels. Our advice to Claremont is free, but the City, the School Board, and developers pay amazing fees to licensed geologists (and lawyers).

Oil and gas geology in California revived in 1974-75. Attention was centered offshore, in the southern California Borderland. In October 1974 the U.S. Geological Survey published Map MF-624, on the Borderland, in 9 large sheets and 34 pages of explanatory text, by Jack Vedder '48, Jim Taylor (MA 1953), and 5 others. In April, 1975, Vedder and Taylor made up-to-date reports to a meeting
of the American Association of Petroleum Geologists on the Queen Mary in Long Beach. They had found that the Catalina Schist underlies the whole 150 x 100 mile area of the Borderland south of the Santa Barbara Channel Islands, and that the sedimentary basins only contain thick sequences of possibly petroliferous sediments close inshore. Oil companies reached similar conclusions and, perhaps as a result, made only a feeble effort to have Federal leases authorized far offshore. They yielded gracefully to the environmentalists. Now the big companies have made Atlantic Richfield, with headquarters in Los Angeles, operator for an effort to find oil off southeast Alaska, near Yakutat Bay. The Glomar Conception will try to drill a hole to 16,500 feet. Oil and gas from the North Slope and Pacific borders will probably come to Los Angeles in giant tankers and go east in pipe lines through San Gorgonio Pass. President T. F. Bradshaw of Atlantic Richfield has moved to southern California and become Chairman of the Claremont Colleges Board of Fellows.

Among those who attended the 50th Annual Meeting of the Pacific Sections of the American Association of Petroleum Geologists and the Society of Economic Paleontologists and Mineralogists on the Queen Mary, April 23-26, 1975, were Warren Addicott '51, Frank Goodban '49, Mason Hill '26, Manley Natland '28, Louis Simon '35, Ed Sprotte '42, Howard Stark '48, Melvin Swinney '40, Jim Taylor, MA '51, Jack Vedder '48, Bill Wadsworth, A. O. Woodford '13, and Don Zenger. The heart of the program was the series of five talks on the continental Borderland, arranged by Vedder. Mel Swinney '40 gave a talk on coal.

Ivan Colborn '51 and his associates at California State University, Los Angeles, put on a perfectly planned and managed meeting of the Cordilleran Section, Geological Society of America, March 25-27, 1975. The beautiful and well planned hill top university, with its gigantic, well built buildings and superbly equipped laboratories, is now almost complete. Some 1250 people paid their fees and many more were present. There were no delays or ticket lines. Ivan was a Program Committee Chairman and his wife Patricia was in charge of Ladies Activities. Donald McIntyre gave the Branner Club dinner address on the sources of plate tectonics -- Suess to Holmes. This was generally considered the high point of the meetings. A. O. Woodford was made an Honorary Member of Branner Club. Warren Addicott '51, Mason Hill '26, Doug Morton, and Art Sylvester '59 were Session Chairmen. Warren Addicott, Alex Baird '54, Kathy Baird '62, Craig Gander '76, Doug Morton, Ed Sprotte '42, Art Sylvester, Jack Vedder, Ed Welday, and A. O. Woodford gave papers. Also present were C. A. Anderson '24, Edgar Bailey, Bob Bean, George Clark '46, Paul Delaney '73, John Forman '49, Frank Goodban '49, Rosy Grannell '62, Cliff Gray, Stanton Hill '33, Barbara Lowe '63, Roland Mora '73, John Shelton '35, Ward Smith, Sherman Suter '74, Jim Taylor, Bob Yerkes '50, Don Zenger, and undergraduates Peter Evans, Allen Glazner, Cynthia Rebeck, Dennis Smith, Sorena Sorensen, and Allen Stork.

During 1973-77 Donald McIntyre has spent or will spend much of his time struggling with the finances and policies of the Geological Society of America, as member or chairman of its Publications Committee. In 1973-74 the Society's deficit was
$700,000. This must be reduced. As Bennie Troxel is retiring as Editor, Donald
is trying for an outstanding replacement, alert to both plate tectonics and sound
scientific method. He spends considerable time in Boulder and the East. Donald,
Ann, and Ewen McIntyre left for Britain July 10. This newsletter was completed
by Jean MacKay, Alex Baird, and Alfred Woodford.

The numbers of geology majors in the department tend to fluctuate, but the trend
seems upward. Only three seniors were here last year (five the year before),
but in 1975-76 there will be eight, and apparently, eleven seniors the next year.
James Secord, one of this year's honor graduates, was awarded a $7,000 Watson
Fellowship for travel and study in Europe for a year. He will begin his tenure
attending the Lyell Bicentennial in Britain. Two of last year's seniors, Sherman
Suter and Allan Trieman, continue graduate work at Stanford with NSF Fellowships.

Don Zenger is now Past-President of the Pacific Section, Society of Economic
Paleontologists and Mineralogists, and serves on the Nominating Committee of the
national organization. He continues his research on the petrology of dolomitic
rocks, long-funded by the American Chemical Society Petroleum Research Fund.
But, this summer he is teaching field geology for the University of Missouri at
their beautiful camp near Lander, Wyoming, in the Wind River Mountains. He
reports that the camp is at 7000 feet in good hard rocks, but that the mapping
is at 5000 feet in better sedimentary strata!

Alex Baird continues as a team member of an X-ray analyzer experiment on the NASA
Viking probes to be launched this summer for Mars. If all goes well, these
instruments will return chemical analyses of the Martian "soil" beginning in
July, 1976. Because the mission is primarily a search for life on Mars, the
spacecraft had to be heat-sterilized. This caused a good deal of concern for
the health of the delicate X-ray instruments - but they seem to have survived.
Alex makes frequent NASA trips. In August he will watch a Viking spacecraft
take off, carrying one of his minilabs. He explained the lander in Icarus, vol. 20,

Gene Hartman, during 1974-75, showed and explained our seismograph array and the
departmental exhibits to many groups of students from Sycamore Grammar School in
central Claremont. He also gave several film-illustrated talks at Sycamore School
and one at Montclair High School. Gene is a wonder with the youngsters.

California Division of Mines & Geology Bulletin 196 entitled "San Fernando,
California, Earthquake of 9 February 1971" published 1975 has an introduction
entitled "Tectonic Setting of the San Gabriel Mountains" by Doug Morton and
Alex Baird. Doug also has a chapter entitled "Seismically Triggered Landslides
in the Area Above the San Fernando Valley". Art Sylvester '59 and David Pollard
'65 are joint authors of the chapter entitled "Afterslip on the Sylmar Fault
Segment".
Many alumni of the past ten years will remember Ray Hanneman, our highly capable laboratory machinist who built much specialized equipment for us. Sad to report, he decided he had had enough smog; in May he moved to Oregon. We miss him.

Summer employment opportunities for our students seem good. Two are working for the U.S. Geological Survey, one for an oil company in Louisiana, one for NASA, and two here in the department under Federal work/study funds. The latter, with the able direction of Gene Hartman, department technician, are revamping our teaching collections in mineralogy and petrology. If alumni have, or know of, student jobs available for future summers, we would be pleased to hear from them.

Brian Ebersole has earned an MA in Library Science and is now a full-time member of the Honnold Library staff, spending half his time on geology. He knows where every geology book or periodical is, and can find it instantly. When a new Dickens or Thackeray writes the classic science story of our time, he should include a Roger Revelle to provide inspiration and protection, an Ernest Lawrence to think of the cyclotron, Stanley Livingston (Pomona '26) for the skill to make it, and a Brian Ebersole to work up a well-documented history.

Manley Natland '28 has given Woody a magnificent slab of Pliocene fossiliferous marble from the excavation for the Richfield Towers in Los Angeles, mounted as a coffee table. The Geology Reading Room has been redesigned by Jules Seltzer with this table as the central feature! In the spring of 1975 Nat gave us an illustrated lecture on his classification of terrigenous sediments. His demonstration of its sound factual basis was very impressive.

Art Huey, Berkeley PhD and former Hancock chief geologist, gave a fascinating lecture in Claremont in May, showing the maps and sections with which he tried to interest American companies in North Sea oil in 1964. He correlated British and Continental geology, and relied on a gravity profile across the southern North Sea, made by placing a meter on the sea floor at points along the profile. He had no data on the northern North Sea.


Professor S. Keith Runcorn of Durham University gave an illustrated lecture on The Moon after a Faculty House dinner May 28, 1975, before a large and varied audience. The next day he talked to the geologists about the magnetic evidence for continental drift.
Tom Bailey, who practically started geology at Pomona in 1921-22, and his wife Dorothy visited Tahiti-Moorea, Australia, and New Zealand in 1975.

Charles Anderson '24 went to Alaska in the summer of 1974. He and his wife Helen then spent three weeks in Greece. Andy enjoyed Santorin (the lost Atlantis) especially.

Mason Hill '26 has published many short papers in the past year. One of the most stimulating has been "Is the San Andreas a Transform Fault?", which appeared in the GSA's "Geology". Mase and Marie spent June 1975 in Indonesia, Malaya, and Taiwan, primarily so that Mase might lecture to the Indonesians and consider the possibility of giving a course of university lectures there in 1976.

Manley L. Natland '28 and a team of three Chilean geologists and paleontologists stationed in Punta Arenas have written Geological Society of America's Memoir 139 (1974) on "A System of Stages for Correlation of Magallanes Basin Sediments." These strata are here divided into 22 Jurassic-Pleistocene stages, on the basis of 7 years of study of 42,000 samples from 60 wells and outcrop sections (in that cold, bleak region). Each stage is represented by a separate map of the whole basin, and the guide foraminifers are figured on six plates. The rather simple basin is 600 kilometers long north south, and is filled with clastic sediments that are more than 5,000 meters thick in the center of the basin. In July 1975 Nat completed the building of 34 condominiums on two acres of land he owns, overlooking the mouth of Aliso Creek in Laguna Beach.

The activities of Roger Revelle '29 during 1974-75 were far too numerous for adequate presentation here. He was President of the American Association for the Advancement of Science. He made a clear statement of his position on "Food and Population" in Scientific American, September 1974. His presidential address in New York January 29, 1975, was a rather grim program for survival in the nuclear age, enlivened by cool good humor. He maintained with equal coolness his side of the vigorous discussion of "No Population Growth" in the Journal "Science". Roger considers the forced control of population growth impractical and undesirable. He expects that education and improved methods of food production and distribution will make life endurable for mankind throughout the world. In particular, politicians and scientists must cooperate.

Roger retired June 30, 1975 as Director of the Center for Population Studies of Harvard University. He will continue as Richard Saltonstall Professor of Population next two years, and will serve as Professor of Science and Public Policy at the University of California San Diego in the spring. He will finish his three year stint in the Presidential succession of AAAS at the end of December, 1975, but will remain as a member of the Council of the National Academy of Sciences until June, 1977. Roger says he finds retiring a hard thing to do gracefully, but he is hoping to learn.
Brad Datson '32 was in Claremont June 8 and enjoyed a round of vigorous reunions with those who remembered the marvellous meals that his mother, Mrs. Davis, served to hundreds of Pomona students in the good old depression days.

Merrill Fellows '32 has retired after 32 years with the Southern California Gas Company. He is now a South Bay real estate man.

Ed Ogier '32 spent some delightful fine days this summer in the Swiss Alps.

Loring Snedden retired as chief geologist of Signal Oil in 1973. Signal is now Burmah, and Loring is a consultant, operating from his home in Long Beach.

H. Stanton Hill '33 will be one of those attending the Lyell Centennial in Edinburgh and London this summer. He will also visit the William Smith country around Bath. He will search the rooms of British book dealers for additions to his own library or to Honnold. Then he will return to his renovation and cataloguing of the books in the Herbert Hoover collection in the Sprague branch of Honnold. During 1975 he has talked on this collection at Rancho Bernardo in San Diego County, and on I. C. Russell's views concerning the Mono Lake area at Pasadena City College.

John Shelton '35, Art Sylvester '59, Jack Vedder '48, and Doug Morton made contributions to California Division of Mines Special Paper 118 (1975) on the San Andreas Fault. John has almost completed a set of slides on the geology of California as seen from the air.

Louis Simon '35 was given a big send-off by the Los Angeles oil geologists when he retired from Texaco last December. He now lives on the Nevada shore of Lake Tahoe, skis, and travels. He was impressed by the negative predictions on Atlantic and Pacific offshore oil at the Queen Mary meetings. He regrets the newspapers' scepticism of industry warnings. Perhaps in the past oil men kept too many things quiet. Now these things are public knowledge, and the public will not believe what is perfectly obvious to an experienced oil geologist.

Rosalie Davis Matlovsky '36 has some conventional descendents and relatives, as well as a daughter who is a television actress and a daughter-in-law who is a professional dancer.

Bob Reed '38, consultant for the great engineering firm of Ford, Bacon, and Davis, has had recent assignments in Algeria, Spanish Sahara, and Morocco, connected with iron ore development. He has also prepared a report on augerable coal reserves in the United States for the Bureau of Mines.
Hal Shelton '38's principal occupation is landscape painting. His interpretive inspirations come in part from his understanding of the geomorphology, acquired while he worked as a topographer for the Geological Survey and as an illustrator for his brother John.

Jane Everest Gregory '38 is on sabbatical with her husband Joe, the Berkeley vertebrate paleontologist. Joe is engaged in acquiring the Black Hawk Ranch fossil quarry on Mt. Diablo for the University.

Wally Wilson '40 is the authority on the energy crisis for a bank that makes big loans on natural resources and their development. The emphasis is on coal.

Jack Schoellhamer '42 has resigned his position as chief of the Marine Geology Branch of the U.S. Geological Survey, and intends to retire from the Survey within two years. He will then be an orchardist at the sea side.

Franklin Olmsted '42 has spent the last several years as chief U.S. Geological Survey searcher for geothermal energy in Nevada. He and four associates have written Survey Open-File Report 75-56, 267 pages, on "Selected Hydrothermal Systems in Northern and Central Nevada". He is also joint author of USGS Professional Paper 486-H, Geohydrology of the Yuma area, Arizona and California (1974). His daughter Ann is a member of the Pomona College class of 1978.

Tom Moran was at home last winter for the first time in many years. The previous year he was in Algeria and the year before that in Brazil. In Algeria he saw socialism and in Algeria plateau basalt.

Jerry Winterer '45, who learned about modern pelagic sediments on Joides and Scripps cruises, is now in the Italian Alps, studying the Jurassic pelagic sediments. He has several papers in press.

Jacky Bacon Martin '46, who was denied a Shell geology fellowship thirty years ago because she was a girl, now has a son who is a Pomona College student.

Colonel Joe Moran '48, a student geophysicist thirty or more years ago, has retired from the Air Force and is working as a geophysicist for TRW Space Systems.

Homer Simmons '49, visited Claremont in June. He was properly impressed by the Pomona College equipment and prospects, even though they are financially microscopic compared to the sums he handles. He is Director of Product Operations, Southern District of Louisiana, for the Shell Oil Company. His District produces more than half of the 350,000 barrels of the company's worldwide daily production. Shell recently paid a 32 million dollar bonus for a Federal lease at 1100 feet depth in the Gulf of Mexico. Now Homer is about to OK a 100 million dollar contract for a drilling platform. Still not a drop of oil from the lease. Exxon and associates paid $620 million bonus in 1973 for a Federal lease farther east that now seems unlikely to produce any oil.
Dick Lounsbury, instructor 1950-1951, now Chairman of the Geology Department at Memphis State University, is working on the petrographic evaluation of the aggregate used in the construction of the Tennessee Interstate Highway System.

Jack Vedder '48 (with Tom Dibblee and Bob Brown of the Survey) has compiled a medium-scale geologic map of the Upper Mono Creek and Pine Mt. area, where a 10-mile left lateral offset on the Big Pine Fault marks the contact between the Coast Ranges to the north and the Transverse Ranges to the south. This map, structure sections, carefully evaluated legend, and selected bibliography are called USGS Map 1-752 (1974). They make up one of the most important contributions ever made to the structural history of coastal California.

During 1974 Don Seely '49 delivered his paper on trench margins in Jakarta, at the U.S. AGU meeting, and at 4 universities. The paper was published by Springer (in Burk & Drake's book on continental margins, 1974). He also gave a paper on wrench faults in Cairo which won the three authors the AAPG best-paper-of-the-year award.

Thane McCulloh '49 has discovered a complex but quite consistent relationship between a refined mean gravity anomaly for a thoroughly drilled sedimentary basin and its yield of hydrocarbons per unit of basin volume. The details are expected to appear in a U.S. Geological Survey Professional Paper next fall. At about the same time, Thane will begin a tour as "Distinguished Lecturer" for the A.A.P.G. He is expected to give two lectures, one on gravity, the other on prediction of petroleum yields.

John Forman '49 has visited California frequently during the past year, keeping track of offshore developments for Mobil Oil. He was in Claremont early in the summer.

Other members of the remarkable class of 1949 were Bob Diemer, John Ernsberger, Joe Ernst, Frank Goodban, and Paul Seright.

Kenneth Segerstrom has received a 40-year pin from the U.S. Geological Survey. Recently he has worked in the Philippines on remote sensing for copper, and in southern New Mexico on placer gold. Now he is engaged in a major project, mapping in detail the upper banded zone in the Stillwater Complex, Montana.

Bob Yerkes '50 has been concentrating on "Expectable Earthquakes and their Ground Motions in the Van Norman Reservoir Area" near San Fernando. See especially U.S. Geological Survey Circular 691 (1974), 44 pages. This report has been widely noticed, as in a "Nature" editorial, April 3, 1975.

Evie van Lopik Stark '50 is deeply involved in the Symphony Guild, Fine Arts Center, and many other activities in Colorado Springs, but still is a summer rock hound.
Jim and Grace Richmond visit Hawaii and southern California frequently. Jim is rather overwhelmed by the development of the department he started at Cal State Los Angeles.

Wayne Burnham '51, head of the Department of Geosciences at Penn State, was elected a Fellow of the American Geophysical Union in June for "outstanding contributions to geophysics."

Warren Addicott '51 published several paleontological papers during the past year. He is now secretary of the Paleontological Society.

Ed Heath '52 is co-author of "What Land-Use Planners Need from Geologists" in a Special 1973 Publication of the Association of Engineering Geologists.


Cortez Hoskins, on December 1, 1974, became Manager of Exploration Research at the Union Research Center, Brea. In September he headed a group of Union Oil earth scientists who visited Claremont and brought us up to date on local geological and paleontological research.

Grant Robbins '54 handles the financial affairs of General Recreation, Inc., Albuquerque.

Paula and Jim Groom ('55), together with their family, spent June on a camping trip through Europe. Jim will attend the Bergen, Norway, Convention of the European Association of Exploration Geophysicists and then return to the study of offshore geophysics for Union Oil Company of California.


Dick Whitney '57 is vice-president of Martin Engineering at Lake Tahoe. He has just finished a consulting job on east shore sanitary sewers to protect the clarity of the lake. Dick has built a new home at Glenbrook and welcomes Pomona College visitors.
Grant Meyer '57 returned in May from five months in Pakistan, Thailand, and Taiwan. He worked with the Geological Survey of Pakistan mapping interfingering continental and marine deposits in the Kirthar Range. He visited the Bugti Hills and Sui gas fields with armed body guards and found literally tons of vertebrate fossils. This summer Grant is spending three months on the eastern shore of Lake Victoria, in Kenya, looking for hominids in Miocene to Pleistocene sediments.

Pat Muffler '58, coordinator of the USGS Geothermal Research Program, has little time for research of his own. Nevertheless, he is joint author of Professional Paper 892, "Physical Results of Research Drilling in Thermal Areas of Yellowstone National Park". The recent international geothermal symposium in San Francisco was financed by Federal and State agencies. It took months of planning, had 1300 registrants, and lasted two weeks. Last fall Pat attended the International Symposium on Water-Rock Interaction in Prague, took field trips in western Czechoslovakia, and then with his wife spent four weeks sampling the wines and scenery of Austria, Switzerland, Germany, and France.


Gerhard Oertel, the professor who in 1959 organized the geology library in Seaver Lab, in 1974 did field work in New Hampshire and Vermont on the transition from slate to schist, as part of a cooperative study by a half dozen British and American structural geologists.

Art Sylvester '59 has returned to U.C. Santa Barbara after being in Bergen, Norway, for two years. While there he studied the petrofabrics and tectonic setting of some magnificently stretched quartzite pebbles on the sole of the Caledonid thrust. He was also involved in the building of a geophysical system for surveillance and prediction of volcanic activity on Jan Mayen Island in the far North Atlantic. He published in Norway a paper on post-eruptive activity on Jan Mayen since 1970. In the June 1975 "California Geology" he has a joint-author paper on the 1925 Santa Barbara earthquake.

John D. Olmsted '59 is a free-lance ecologist in Sausalito. His Pygmy Forest Staircase has been proposed as a State park. He is working on a trail of beauty spots across northern California. John continues to teach U.C. extension biology field courses.
Bob Gill '60 has acquired the large and fine benitoite collection saved out by dealer Buzz Gray of Fallbrook, the long-time lessee of the benitoite locality. Both Buzz and Bob think that the largest, perfect benitoite crystal in the world is in the Pomona College collection.

Walt Gulick '60 is in Billings, teaching philosophy at Eastern Montana College.

Norman Hyne '61, head of the Earth Sciences department at University of Tulsa, is trying to figure out the origin of the Strait of Gibraltar. Can it be a Pleistocene transform fault? Last winter he was chief scientist aboard Duke University's R/V Eastward in Lake Maraboo. The NSF sponsored research centered on the Catatumbo Delta.

Rosi Grannell '62, of California State University, Long Beach, has published on the gravity along the Cristianitos Fault from San Onofre north. She was also one of the authors of a gravity paper in the California Division of Mines Bulletin on the San Fernando Earthquake of 1971. She has a $28,000 grant from the USGS for a gravity study of the Brady Hot Springs-Soda Lake-Reese Valley areas and so is in Nevada for the summer. She and John Fett are also working on gravity precursors of earthquake activity on the San Jacinto Fault.

Jim Kelley '63 was 1974/75 Acting Chairman of the University of Washington Department of Geological Sciences. He has now become the Dean of the School of Natural Sciences at California State University, San Francisco. This seems to be the end of those long oceanographic cruises for Jim.

Jim Williams '64 is teaching oceanography, astronomy, and natural history (Geomorphology of the West) at Citrus College.

Prue Beckh '64 spent June in Central Europe. She is now back in New York.

Bob Dickey '64 is an engineering geologist with Converse, Davis, and Associates of Anaheim. He finds statistics most useful as a philosophical basis for testing soil engineering data.

Dave Pollard '65 was back in Claremont for his tenth reunion. He is chief author of a paper on fingered sheet intrusions in the March 1975 Bulletin of the GSA. He is now working on geothermal energy for the USGS and stationed at Menlo Park.

Donald O. Doehring (MA '65) got his start on the geomorphic effects of forest fires and went on to the study of pediments. He then began the study of tropical (or subtropical) geology. He is the senior author of "Hydrogeologic Constraints on Yucatan's Development," the leading article in "Science" for November 15, 1974. The exceptional clarity and skill of the presentation makes painfully clear the unfortunate difficulties in the way of the development of this particular part of the subtropics. Don has now left the University of Massachusetts and joined the
geology department of Colorado State University (Fort Collins), already famed for prominence in geomorphology. We shall welcome Don's return to the west when he completes his summer stint as acting head of the Massachusetts department. He expects to transfer a $60K Water Resources Grant to Colorado.

Steve Norwick '65 has left Boston, Stone and Webster, and engineering geology for an Associate Professorship at the School of Environmental Studies and Planning at California State Sonoma. He is teaching geology and planning geological-biological field projects.

Bill Wadsworth, who is now making things go as Chairman of the Geology Department at Whittier College, has published in GSA Memoir 142 (1975) a statistical treatment of petrographic variations at Ajo, Arizona. He and an assistant are spending much of the 1975 summer in the Pomona College analytical laboratory, still working on Ajo samples.

Bob Drake '65 is at Berkeley, working on a joint Geology-Physics project, studying volcanic rocks along the San Andreas Fault, as they relate to geothermal potential. He is also dating East African hominids and vertebrate fauna for the Berkeley anthropology department. The sequence there is significantly younger than previously thought. Bob continues work on the chronology of the Chilean Andes, where he has found evidence of Oligocene and Miocene volcanism.

Bob Michael '66 is now rebelling against bureaucracy. He fears that "if the paper blizzard gets any worse, one won't be able to belch in the field without filing an environmental impact statement." He wants to "do good old pound-on-rocks geology rather than argue with other bureaucrats over whether to allow geothermal leasing in areas of suspected prairie dog towns." So, on June 2 he became Project Geologist for AGIP (U.S.A.), the "American arm of the Italian government-sponsored energy company, which is doing uranium exploration (in unconventional terranes!) out of Denver."

Gene Pearson '67 of the University of the Pacific at Stockton ran the Colorado River rapids three or four times in the summer of 1974. In 1975 he is back there again, as geologist, cook, and swamper for a boating company.

Ralph (Tommy) Thompson '68 and Celia Kathleen Joughin were married June 21 in Washington, D.C., and now are living there.

Mark Liggett '69 of Cyprus Georesearch Company, a subsidiary of Cyprus Mines Corporation, is still working on geologic applications of satellite remote sensing techniques, including programs for mineral, groundwater, and geothermal energy exploration, and reconnaissance mapping of potential seismic hazards. During the past year he made several trips abroad, to discuss with foreign governments the application of Cyprus research to systematic resource exploration and management. He is now off on another such trip.
Cal Miller '69 and wife Molly are PhD candidates at UCLA. Cal is working on strontium isotope studies of southern California intrusives. Molly collects trace fossils in New York and the Rocky Mountains.

Dick Jarrard '69 got a PhD at Scripps and moved to U.C. Santa Barbara, where he taught for two quarters and then transferred to research on plate movements in the North Pacific. He is now concentrating on paleomagnetism instead of hot spots.

Dave Vaniman '69 is back from Africa and pursuing graduate work at U.C. Santa Cruz. His thesis will be on unusual feldspars from the African Precambrian rocks. In May he hosted Alex Baird at the U.C. Santa Cruz campus. Alex was there representing Pomona at the inauguration of Mark Christiansen (ex-Berkeley geologist) as the new Chancellor of the campus.

Eric Sundquist '70 and Holly Fox will be married September 6. Eric taught at Harvard last year, as well as making progress on his thesis, which will deal with carbonate dissolution at the sea-sediment interface. He hopes to finish in one more year.

Jo Ann Ahrens '71 manages to care for a family and also study paleontology at Colorado State University, Fort Collins, and hydrology by correspondence. She hopes to transfer from the U.S. Department of Agriculture to the Geological Survey and stay in Fort Collins and near the Colorado mountains.

Tom Doe '71 is learning the diamond drilling trade this summer on the world's hardest granite, in Montello, Wisconsin. This stone was chosen for U.S. Grant's sarcophagus. Tom is investigating potential sites for the storage of electricity in large superconducting magnets imbedded in bedrock, by drilling 500-foot holes and studying joints, groundwater and in situ stress. In another year he hopes to have a PhD in geology and mining engineering.

Jeff Dunn '71 is about to get an Arizona MS. He is now a ranger at Grand Teton Park. Next fall he will join Tom Doe at Wisconsin. He will be a research assistant, making a sediment map of the Arctic.

Bob Jenkins '71 is entering his third year of work on a PhD in geology-geochemistry at Colorado School of Mines, on a geochemical model of the fluorspar-gold-bismuth-germanium deposits in the Jamestown District, Colorado. He is also teaching courses in mineralogy.

Steve Bushnell '72 is becoming an experienced consultant on copper ore deposits, as a substitute for his chief, Professor Ulrich Petersen of Harvard. He spent the summer of 1974 in Peru, and made two trips to Panama in 1975 to help General Torrijos and his government in negotiations for the development of the enormous Cerro Colorado deposit there. The General offered him a fine job, which he refused in order to complete his Peruvian thesis. He has passed his Harvard orals.
Jim Kauahikaua '73 expects to complete his MA at the University of Hawaii this fall. He is exploring electrical and electromagnetic techniques for geothermal prospecting. A preliminary paper was published last January in Hawaii.

Roland Mora '73 spent the 1974 summer working for Standard Oil in Nevada. He is now an advanced graduate student at UCLA.

Carol Venolia '73 will be at the University of Oregon next year.

Robert Leggewie '74 and Ray Alf flew to Nairobi, Kenya last autumn, and then went to Olduvai Gorge and Lake Rudolf, classic areas for the early history of man. They brought home some precious specimens.

Dennis Smith '74 spent last year taking Pomona undergraduate geology classes. He is now working for Tenneco (Kern County Land Co.) in Bakersfield as a technical assistant in geology, moving from exploration to production to the office of the division attorney. He will start studying law at USC in the fall, and expects to be a lawyer specializing in things geological. He is completing a special study course on the comparative legal/geological aspects of two reactor sites - one successful, one not: San Onofre and Corral Canyon. For information on the latter he is indebted to an expert - Bob Yerkes, who very generously made copious records, maps and reports available.

Curtis Spalding '74 is spending the summer in Mt. Rainier National Park.

Sherman Suter '74, now at Stanford, is still looking for just the right PhD research project. Last spring he and Paul Delaney '73 took a course in finite strain from Dave Pollard '65. Sherman's office has been next door to Ward Smith's. Allan Treiman '74 also had a course under Dave Pollard.

Allan Treiman '74 is doing a Stanford MA project on a perhaps hypabyssal rhyolite near Los Alamos, New Mexico. His adviser is Dick Jahns. He has also been working on a Franciscan gabbro.

Craig Gander '76 and Gloria are the very proud parents of Melinda Sue (Mindy) Gander, born November 19, 1974. On July 4 Mindy was a lively observer of the biggest and best parade ever seen in Claremont.