THE MONADNOCK

of the

Clark University Geographical Society

"The very best kind of education is obtained in doing things one's self under competent direction and with good guidance."

CHARLES W. ELIOT

VOLUME XXXIV, NO. 1 DECEMBER, 1959

A MERRY CHRISTMAS

The MONADNOCK staff would like to extend our best wishes for a very happy Christmas to all former and present members of the Graduate School of Geography. The response to the questionnaire has been extremely satisfying. We would remind those who have not completed it to do so as soon as possible. This is the only way we have of maintaining contact with CUGS members.

HOLIDAY GREETINGS FROM DR. VAN

Time goes fast and again I am called upon to wish our alumni and alumnae Happy Christmas and a successful 1960. At Clark this season we face an enlarged plant, a Student Union, a new Science Building and two new dormitories -- a sign of progress and of confidence in the future. There are more signs of a new spirit as shown by an Evening School which now has more students than the day college.

Clark has changed with the times, but it has retained its qualities of high grade training and research. So we have reason to be thankful this Christmas season and this is reflected in my Christmas message to you.

THE MONADNOCK STAFF

Editor
Roy J. Fletcher

Business Manager
Harry A. Sickler

Typist
Mary A. O'Malley

The MONADNOCK is regularly published twice a year in December and May, by the Clark University Geographical Society, Worcester, Massachusetts.

STELLAR GEOGRAPHY and STELLAR GEOGRAPHERS

Capt. Dale Severtson, USAF

Geographers face a time of evaluation of geography and decision whether geography has a legitimate place in system and space research, exploration and development.

The disciplines two principal sciences, physics and chemistry, as well as other related sciences of a pure nature, the several kinds of engineering, and the foundation discipline of all physical fields, mathematics, are pushing into the solar system. They are also giving serious attention to the probabilities of Deep Space, based on limited present knowledge and upon probabilities of theory resulting from investigations and evaluation of such knowledge and theories.

In the short time of three years, these disciplines and long conservative endeavors such as medicine, have ceased to idly speculate on remote dreams or feel that persons who seriously talked and computed space travel problems were not quite respectable.

New publications of the highest scientific calibre are appearing. Established publications devote entire issues and large portions of their papers to "space" articles.

Seemingly unrelated fields of study are entering the exclusive priesthood of pioneers in space research. These are sociology, law, para-psychology, and theoretical philosophers. The world-public is interested in this new object of research and has accepted it as an inevitability if not an immediate reality.

This is the time for research and study by scientists in fields having any connection, however, remote, to this new thing. Not only is this the time, but a responsibility exists to humanity to examine the legitimate functions of each field. Responsibility does not end within the fraternity but only when nothing more remains to be done. Mathematics and logic indicate the end is at the point of intersection of two parallel lines: infinity.

Geography, by its definition in Moore's A Dictionary of Geography, and by definition deduced from consideration of its functions on planet Earth, appears to have not only a legitimate place on the space team but one of extreme importance that will increase with progress into research and actual penetration of Deep Space.

It is significant that a differentiation be made between travel in the Solar System and Deep Space penetrations because the functions and magnitude of each activity changes outside Earth's backyard--the Solar System. Outside this relatively safe cocoon lies the indescribable, endless, ever-expanding totality called Deep Space.

Geography and geographers will become vitally important in Deep Space because within this multiple-cross-dimensional place are the hundreds of thousands of stellar bodies which will probably within reason have suitable environments for Earthmen. To expedite analysis of suitability and capability and to eliminate a future stellar garbage heap, planned use must be instituted from natural resources to organized approach orbits relative to a stellar body. The geographer can take the knowledge and wisdom of the ages of man's habitation on and use of Earth out to a virgin place and in comparatively ideal circumstances of enlightenment and willingness to achieve the best and, finally, serve as advisors and stewards of planned utilization of the "New Earths" to the levels of attainment Earthmen now only dream about.

In initial stages of fledging travel, geographers, as in very early times, can serve as navigators. A part of the geographer's discipline, cartography, certainly gives to navigation its aids and tools. This part of geography can readily be expanded into use by the designers. Crew weight will be critical and a multi-purpose member will be invaluable: navigator, explorer, correlator of data and data summations and advisor for applications.

With the additional training set forth below, the geographer would stand in a logical position to assume the leadership of an exploratory project. A geographer would not be limited to narrow specialization but would have a working and adequate knowledge of several fields in addition to the more particular field of geography. This would be nearly ideal for evaluating results of several fields of inquiry. By virtue of geographic training the geographer would be able to correlate and synthesize each team member's results and produce a thorough and integrated report with intelligent and well-founded recommendations. During the cause of the exploratory investigation the geographer would, for the reasons above, be most competent to direct investigation for an area of a stellar body surface or a varied dimension volume of space. Such a person logically would serve as the leader of an exploratory team.

The implications, functions and justifications for geography having a legitimate place in this newly initiated adventure of man are numerous and sound. A few are mentioned above.

The agreement that a geographer's training is not consistent with or technical enough for this work is valid. However, training and education begin with and end with the human mind and not with just the mind of a physicist, chemist, historian or geographer. A stellar geographer must, of necessity, have training in astronomy, biology, physics and other sciences and in mathematics. This is not difficult because a geographer would need little beyond thorough basic courses in each in addition to comprehensive geographic training. Correlative ability is the main thing the person must have. If a person is capable of mastering the Doctor of Philosophy training he is certainly capable of mastering the additional training set forth above. This training will increase the geographer's training period not over two academic years. This is not excessive or unreasonable. It can be shortened by utilizing full calendar rather than

academic years and concentrating the curriculum.

The development of the sun-sail, ion-flow engine, magneto-aerodynamic shock application, stored energy in solid material, increased plasma ion application, the beginning of realization of the implications of relativity dimensional possibilities, and other items for research and use are clear indications of the progress rate in space travel.

It seems that a serious evaluation of geography's and geographer's position and function in space research should be done by geographers and the results be given to other concerned disciplines for consideration. A hurried study under pressure of time and a hurriedly devised method and curriculum for geographers in space might well be disastrous for the discipline and man's progress into space research.

Within the realm of proportion Hendrik Willem von Loon, in 1932, wrote appropriately, even on this very subject by more than direct inference, in his book Van Loon's Geography, ".

> ".....when you come to think of it, is there really such a very great difference between the world at large and your own native village? If there is any difference, it is one of quantity rather than quality. And that is all!
>
> "You will say that I have wandered all over the place, from Kilimanjaro by way of Dr. Reed and Dr. Ross to planetary planning for the future.
>
> "But what, as Alice might have asked, is the use of a Geography without a little travelling?"

THE AZORES SEMI-STATIONARY ANTICYCLONE AND PRECIPITATION IN EASTERN UNITED STATES

Roy J. Fletcher

This study was initiated in the belief that the position of the semi-stationary anticyclone (STA) present in the Atlantic Ocean (Azores High) may be an important factor in the amount and distribution of precipitation received in that portion of the United States east of the Rocky Mountains.*

Climatic records were available, with only a few gaps, from 1886 to 1955; so the ten wettest and eleven driest years were selected. When a particular state had one of its ten wettest (or driest) years on record, these years were noted and the aerial extent taken into consideration in the final selection. Two indices for each year were used. One was largely a reflection of the years when wetter-than-average (or drier-than-average) conditions prevailed over all of the eastern and central states and the other gave the years when an extreme amount of precipitation fell in a few states. Often, during a year when the states east of the mountains were averaging over 100 percent of normal precipitation, some states were experiencing drought. Thus a wet year could also be a drought year by either method of selection. By employing both methods it is hoped that the choice has been made more accurate. An example of this problem is the dry year 1889, when the northeastern states were very wet.

The Azores High (STA)

To study the position of the semi-stationary anticyclone and observe how the moist mT Atlantic air is entering the continent, firstly, the centers of the STA were recorded to the nearest degree. The location was obtained by observation of the daily charts of the Historical Weather Map series published by the Weather Bureau (United States Weather Bureau, Synoptic Weather Maps, Daily Series, Northern Hemisphere, Sea Level and 500 Millibar Charts; and similar titles). Unfortunately, charts for several wet years (1941 and 1942) were not available in Minneapolis so the eleventh and twelfth wettest years were chosen. Because the driest months during most years are July and August in this portion of the United States, only these months were inspected although they may not be the wettest months during the wet years.

Because several centers occurred within the large high pressure cell, all "H"s were recorded that lay within. Where a closed isobar was present but the "H" absent because other meteorological data took up most of the space, the center was accepted. If the "H" lay north of the polar front it was omitted unless the front was washing out. The value of

*Mr. Robert Lucas, University of Minnesota, worked in conjunction with the author and some of his findings have been included.

the isobar having the highest pressure was recorded as well as any southwestern, finger-like, projections of the STA.

The average position of the center of the STA for the wet years is 35.6N 40.6W. The mean for July is 35.6N 40.5W and August is 35.1N 40.6W. The mean center for the drought years is 36.2N 38.3W with a July location of 36.3N 37.8W and 36.1N 38.7W for August. In August this is one degree farther north and two degrees more easterly than the wet years' anticyclone center. In July the latitude is similar but the dry years' STA center is three degrees east of that for the wet years. The wet year centers are more clustered and lie southeast of those for the dry years. The centers group themselves by decade in the dry years. The only years that allow sufficient precipitation to the Great Plains are those with July-August centers lying between 36 and 39 degrees west longitude. Here also lie the greatest number of years that have a dry Southeast.

Inspection of the position of the STA during the wet years show that if it is too far northeast a continental high intensifies and moves south into east-central United States. The center may not be greatly altered from the mean position but the southwest extension of the high (Bermuda High) may have retracted. This prevented mT air from entering the Gulf Coast, although the Atlantic coast may be receiving precipitation. If the STA moves sufficiently westward to lie over the southeastern states, much of the air entering the western region originates in the Southeast but some entering Texas may come over the Gulf of Mexico from the Atlantic Ocean. A small high pressure cell in the southeast as the STA expands southwestward will cause drought in the Southeast. If it moves farther southwest, a separate small high pressure cell may form in the Gulf of Mexico or the tongue of the STA may pass over northern South America or Yucatan. Both conditions cause drier winds to enter the southern Great Plains.

The mean centers of the wet years do not group themselves into decades as well as the dry year centers. However, the wet years have a greater fluctuation between the July and August mean centers. The 1930's have the least concentration and in this respect more closely resemble the wet years than the other dry decades. There does not appear to be any correlation between degree of concentration of centers and areas of drought or wetness.

Percent of Daily Centers, in Miles Radius

	200	400	600	800
Dry Years (1910, 1917, 1930, 1931, 1933, 1934, 1936, 1952, 1953, 1954, 1955)	20.0%	51.7%	76.3%	88.6%
Wet Years (1905, 1906, 1912, 1915, 1919, 1923, 1927, 1929, 1945, 1951)	13.1%	38.5%	62.7%	82.5%

Stream lines denoting the most westerly and northerly extent of unmodified mT air were plotted for each day of July and August during the years under investigation. The wet years show a more northern penetration while the streamlines for the dry years are more broadly spaced from east to west, indicating less penetration to the north and west. They are a reflection of the position of the STA.

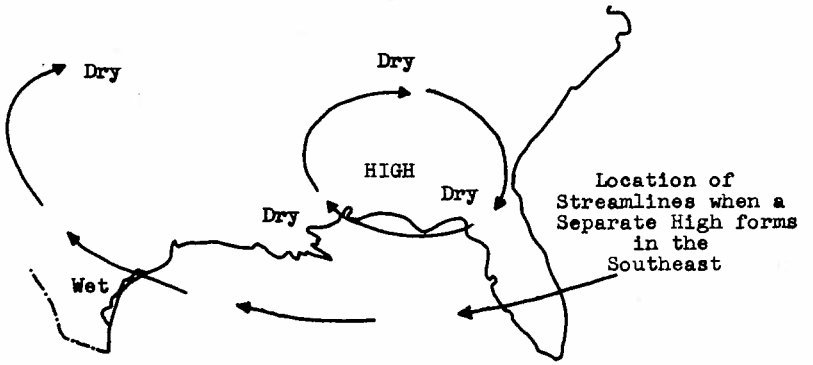
Summary

The mean yearly centers of the STA move in a northeast-southwest direction. If these are too far east or west, the Great Plains will likely be dry. Under these conditions the Atlantic coast will be humid especially if the western side of the STA lies offshore, east of the United States. If the center is too far west or the projection of the STA is often occurring, an "Indian Summer" high pressure cell may develop to provide dry conditions to the Southeast and often a dry Gulf Coast.

A large high pressure cell in the central portion of the United States will allow entrance of mT air only into the western Great Plains.

The day-to-day fluctuation of the centers of the STA during wet years is greater than for the dry years. More southwest extensions of the STA occur during the dry years.

No drought year is everywhere dry as some of these years may be very wet in another section of the country. The reverse is also true, as the precipitation during a wet year is not consistently excessive over the entire region east of the Rocky Mountains. This statement raises the problem that some years that have been considered as dry because a small area was intensely arid or a large area only slightly below normal may not be drought years. Examples are the years 1889 and 1890. The intensity and areal extent must be considered and, if possible, the numbers of people involved.



FIELD CAMP REPORT

The field camp this semester was held in the Worcester area, the University acting as headquarters, with the entire staff guiding new arrivals and old hands through the three weeks of instruction and "experimentation".

The physiography and land use of the area around Worcester was studied and mapped. The second phase began the following week with a bus tour of Sterling Town (similar to townships outside New England) to acquaint all with the location of apple orchards in a new study area. During the following two weeks daily trips were made by the teams to their portion of the town and numerous meetings in the Libbey Library rehashed the problems which arose. The bakery shop, coffee shop and bandstand of Sterling village witnessed considerable traffic from the Clark crew. Most can attest to the intricacies of operating a soil auger in the unyielding "soil". Unfortunately, the implement could not be used on the few unyielding "farmers."

Several interesting days were spent locating industrial sites in Holden and Shrewsbury Towns and in attempting to delimit the central business district of Worcester. The micro-climatic study, so eagerly anticipated by some, was not attempted for cloud and rain prevailed. However, several hardy souls did arise at 5:00 a.m. and drove to nearby hills, selected for their eastern exposure, in order to witness the eclipse of the sun. Clouds prevailed again. While returning home one group of non-geographers was observed to be awaiting the sunrise by peering intently towards the lighter western horizon.

****

STAFF NEWS

With the academic year completed, Dr. Samuel Van Valkenburg immediately departed for Western Europe to study land use in the countries not in the Common Market. He remained until mid-September, travelling, gathering statistics and meeting officials in Spain, Portugal, England, Ireland, Sweden, Switzerland, Norway and Austria. During September he attended the meeting of British Geographers in York and spoke on the summer's work. At that time the up-to-date land use map for Western Europe was presented.

Presently, Dr. Van is working on a paper to be presented to the I.G.U. Congress next summer and an article dealing with the geography of Iberia. An article on the Common Market is to be published in Economic Geography. He has also written an article in a memorial publication to Olaf Jonasson -- "Festskrift till Olaf Jonasson."

Dr. Raymond Murphy has been kept very busy editing Economic Geography and working on an urban geography textbook. He has published two articles concerning central business district research. These may be found

in Urban Problems and Techniques, Number 1, Edited by Perry L. Norton, Lexington, Massachusetts, 1959 and Planning and Development in Urban Transportation - 1959, Highway Research Board, Bulletin 221, 1959.

With his son, Gerard, and a visiting geologist from Helsinki, Dr. Esa Hyyppa, Dr. Richard Lougee made a trip across the continent and return, covering 14,000 miles for the purpose of gathering data on the "Monoglacial Ice Age". They visited some of the same places and people on the tour of 1958, but did far more collecting of samples and gathering measurements. The samples will be given careful analysis and Carbon-14 datings this winter. The survey work accomplished this summer with Dr. Hyyppa settled several problems and opened new ones. The contemporaneity of the earliest and greatest of the late-Glacial upwarping movements is now recognizable in shoeline evidence all the way across the continent from the Atlantic to the Pacific. The highest known marine water plane on the North American continent was measured at 1980 feet elevation in the State of Washington. The coming winter will be devoted to preparing reports on the collected data to be presented in America and at the coming Stockholm Congress.

During the summer Dr. Henry J. Warman taught courses in "South America" and "Geography for Teachers" at the University of Southern California. The return east took most of August "zig-zagging" across the country. He is presently serving as President of the New England-St. Lawrence Valley Geographical Conference and as Chairman of the Planning Committee for the National Council for Geographic Education. Dr. Warman is completing a high school textbook and working on another text on the geography of South America. Last June he became a proud grandfather: congratulations!

Mr. Guy Burnham's summer course in cartography was well attended again this year and he continues to guide the shaky hands of undergraduates and graduates alike. The winter course is keeping many students very busy.

Dr. Hans Carol made an auto trip through the Midwest, the Dakotas, Montana and Alberta in early summer and later visited California and New Mexico. He also journeyed to Zurich, Switzerland to holiday with his family. Dr. Carol is writing an article on the hierarchy of central functions within the city and is offering a non-credit, well attended, course in the development of geographic thought.

The visiting lecturer this semester is Dr. Jack Richard Villmow, who is offering a course in the Geography of Russia. Dr. Villmow received a M.S. and Ph.D. in geography from the University of Wisconsin and has been Assistant Professor of Geography at Wellesley College, Massachusetts. This year he is on leave from Ohio State University where he has been Assistant Professor since 1956. With research interests in the Soviet Union, Climate and Europe, he has published articles in the Annals, Journal of Geography and other periodicals.

****

Each September the Workroom receives its new compliment of hopefuls who join the ranks of the "old guard" returning from a summer at various types of work or study. With the entire staff available to initiate the "freshmen", friends were quickly made or reinforced.

One of the several students working on the Ph.D. dissertation is ALTAF AHMAD (M.A. 1942, Muslim University of Aligarh). His major interests are human and cultural and he hopes to return to Pakistan to continue teaching.

Another of the several college teachers returning to graduate school for the Ph.D. is VAN AROIAN (B.A. 1951, Boston University, M.A. 1953 Harvard). Van, who is married and has a young son, is interested primarily in urban geography. He worked in a laboratory during the summer.

SIMON BAKER (B.S. 1951 and M.A. in Agriculture 1952, University of Arizona) is preparing for orals and language exams. His dissertation will deal with land use in southern Ceylon and he is now working for the Worcester Planning Board.

PAUL R. BEAUDET (B.S. in Education 1957, Fitchburg State Teachers College) spent the summer in the basement (cartography). "Nanook" is interested in political geography and climatology.

One of the two students from India, SUMITRA BENOIT (B.A. 1950, Isabella Thoburn College, Lucknow, M.A. 1952, Allahabad University) is about to begin writing her dissertation. Tentatively, it will deal with state boundary realignments in post-1947 India in relation to the human and cultural elements involved. Last summer she worked in a girls' camp in northern Minnesota and made a trip to the western states. After Clark, Sumitra will continue teaching at Isabella Thoburn College in India.

ROBERT E. BLACK (B.S. in Education 1958, Boston College) is another of our married men who last summer worked on his thesis and the Quartermaster Corps Climate of Central Africa Project. Bob plans to do advanced study in climate and resources; probably at Oregon State College.

DAVID D. BRODEUR (A.B. in Government 1955, Harvard) is completing his M.A. program. Dave is interested in political and economic geography and hopes to be a foreign service or State Department officer.

ROY J. FLETCHER (B.A. 1957, University of Alberta, M.A. 1959, University of Minnesota) comes to Clark from Canada where he taught at the University of Alberta Summer School. Fletch is interested in geomorphology, climate and air photo interpretation, especially where they apply to locational factors of transportation facilities and settlement sites. He plans to teach at the college level.

ALETA GRILLOT (B.A. 1958, Western Reserve University) is one of the several completing the M.A. thesis and taking the residence year for the Ph.D. at the same time. Regarding thesis and last summer's activities, she worked as a waitress six days a week in order to gain adequate funds to spend the seventh mapping the C.B.D. of Cleveland. Her interests are ur-

ban geography and physiography.

JOSEPH HICKEY (B.A. 1954 and M.A. 1958, Clark University) is surely the "old hand" of the workroom crew. Joe is preparing for his orals and working on the Climate of Central Africa Project. During the summer he worked on the project and toured Newfoundland and the Maritime Provinces. His interests are regional planning, urban and cultural geography and he plans to work for the government or in a planning office.

BENJAMIN HOWATT (B.S. IN Education 1959, Farmington State Teachers College) comes to Clark from Maine and is particularly interested in climatology and economic geography. Last summer Ben, a married man, worked in a boys' camp.

SUSAN HUCK (B.A. 1951, Syracuse University, M.A. 1954 University of Michigan) who hails from New York City, is another college teacher in her residence year for the Ph.D. During the summer Sue travelled extensively in Europe and she now occupies a desk in the "typewriter" alcove in the northeast corner of the Workroom.

MRS. LILLIAN (WALLACE) KENT (B.S. in Education 1957, Fitchburg State Teachers College) is in the second year of the M.A. program. Summer saw her keeping cool in the cartography laboratory. Interested in historical and political geography, she wishes to continue teaching.

Congratulations to HAROLD KEUPER (B.S. 1959, Carroll College, Waukesha, Wisconsin) and AGNES KEUPER (ZETTERMAN) (B.A. 1958 Carroll College) who are our newlyweds. How geographic can one get? Aggie is completing her thesis, a population study of Worcester, while her husband is being initiated into study at Clark. Areal interests center around Africa but Harold also has leanings toward urban and physical geography. He hopes to enter college teaching.

ROBERT J. HUHTANEN (B.S. in Education 1958, Bridgewater STC) "worked" during the summer on his thesis maps and is now in his residence year for the Ph.D. "Hoot" is interested in economic geography, factory whistles and steam locomotives excluded.

LAWRENCE T. LEWIS (B.S. in Education 1959, Worcester STC) is a native of Worcester and is interested mainly in physical geography. Larry, who is in his freshman year in the Graduate School, hopes to teach after completion of his studies.

JAMES S. LOHMAN (A.B. 1953, Washington University, Ed.M. 1956 Harvard) is in his Ph.D. residence year and left a teaching position to attend Clark. With major interests in cultural geography and physiography, Jim wishes to teach these subjects in college. He is married with three children.

ROBERT B. LOOKER (B.S. in Education 1956, Salem STC) last year returned to Massachusetts from two years in the army and is now a "veteran" of the Workroom. In the Ph.D. residence year he is also working on his M.A. thesis, a physiographic problem.

PAUL J. MIKA (A.B. 1953, University of Pittsburgh, M.A. 1958 George Washington University) has come to us from a year studying at the London School of Economics. With a major interest in economic geography, he is now writing a dissertation on comparative studies of English C.B.D.'s. Paul is another geographer having had the good fortune to tour Europe during the past summer.

CLARENCE ALBERT MOREY JR. (B.S. in Education 1957, Towson STC, Maryland) is an M.A. candidate in his first year. Al enjoys climatology and physiography with regional interests in Russia. His aim is college teaching.

RICHARD E. PRESTON (B.A. 1955, Central Washington College of Education, M.A. 1957, University of Washington) having completed the Ph.D. residence, is working on that formidable obstacle, foreign language requirements. Rich is a part-time planner for the Worcester Planning Department and teaches cultural geography at Suffolk University.

FISKE E. RAWDEN (B.A. 1958, Wayne State University) returned to the Workroom after a summer of swimming, fishing, sailing and associated field studies in human geography. Some of us have all the luck! Undoubtedly, last year's editor of The Monadnock, who is now working on his Ph.D. residence, will soon be leaning on the rostrum.

RICHARD W. RESESKA (A.B. 1955, Niagara University) in his second year at Clark is interested in economic and urban geography. Last summer he worked as a map processing assistant in the Library of Congress Map Division. Future plans involve a planning position.

JOHN RICKERT (M.A. 1958, Rutgers) from New Jersey has major interests in urban and settlement geography. He plans to teach after completion of his dissertation.

I. MADE SANDY (B.I. 1954, Bandung College, M.A. 1959, Clark) whose home is Jakarta, Indonesia, is our "numbers" man and is the only one who understands the eccentricity of the calculating machine. "Sandy" is writing his dissertation on the precipitation of Java and is also interested in hydrology and soils. The Workroom will not be the same when the "Doctor" returns to Java.

DALE SEVERTSON, U.S.A.F. (A.B. 1949, Gettysburg College, M.Sc. 1958, Oregon State College) left the Air Force Inspector General's Office to work on a Ph.D. "The Captain's" home state is Iowa and he is most interested in resource geography and exploration. After graduation he will teach geography at the Air Force Academy and in his spare time plan for the glorious and inevitable day when the South rises again.

HARRY ALAN SICKLER (B.S. 1953, Trenton STC) is the Monadnock's efficient Business Manager. His geographic interests are political and land utilization. He plans to be a college teacher. On completion of the M.A. he hopes to study abroad.

GOVIND S. SINGH (B.A. 1948, M.A. 1950 Allahabad University, India) left his wife and a teaching position at home to study in the United States. He is in his Ph.D. residence year and has political geography as a major interest.

CAROLYN A. STEIDLE (A.B. 1959 Mount Holyoke College) in her

first year toward the M.A. has interests in urban and economic geography. In a year or two she will probably begin teaching (or subjecting) college freshmen the intricacies of contours and other pseudo-geographic phenomena.

LESTER UNTERBERG (B.A. 1958, Hunter College, New York City) in his second year, is making a population study for the M.A. thesis. Les is newly married and has the honor to be one of Dr. Lougee's Beamen Boys (alias Alidade Aces, Delta Demons and Contour Kids).

DAVID EUGENE VINCENT (B.S. in Education 1959, Salem STC) another native of the fair state, enjoys political and physical geography. He plans to enter the teaching profession or government service.

RUDOLPH WIEZEL (A.B. 1930, Syracuse University) in his Ph.D. residence year, is one of the most travelled members of the Workroom. Rudy is not plagued by the difficult language requirements for he is multi-lingual.

* * * * * * * * *

Geographers have always tended to worry themselves over definitions. To demonstrate that we have a few problems in relation to other fields, the following definition is quoted from the American Geologic Institute, "Glossary of Geology":
CACTOLITH: A quasi-horizontal chronolith composed of anastomosing ductoliths, whose distal ends curl like a harpolith, thin like a sphenolith, or bulge discordantly like an akmolith or ethmolith.

DEAD LETTERS

If anyone knows the whereabouts of the following people, please drop us a line before we are compelled to retire them to the inactive file.

Day, Dorothy M.
Direnzo, Vincent
Glasgow, James
Hartman, George W.
Hebrawi, Mohamed Fateh Akiel
Hunt, Thomas F.
Krebs, L.C.
Liu, En-lan
Moody, William B.
Ogilvie, Bruce C.
Perejda, Andrew D.
Robertson, Ina C.
Shih, Li-chang
Simpson, Robert B.
St. Onge, Ronald
Stone, Robert

* * * * * * * *

1959-60 CUGS OFFICERS

Dale Severtson	President
Harry Keuper	Vice President
Carolyn Steidle	Secretary
Paul Beaudet	Treasurer
Robert Huhtanen	Social Chairman
Roy Fletcher	Editor Monadnock
Harry Sickler	Business Manager

WORKROOM COMMITTEES

Robert Black	Chmn. Workroom Com.
James Lohman	Workroom Com.
Harry Sickler	Workroom Com.
Fiske Rawden	Chmn. Darkroom Com.
Richard Reseska	Darkroom Com.
Susan Huck	Darkroom Com.
Steve Wilson	Special Programs

TWENTY-FIVE YEARS AGO

From September 12 to December 12, 1934, eighteen students and five professors (including Dr. Van) travelled through the eastern states on an extensive field excursion. Seven cars with trailers were employed and the average mileage per car was 10,000. It must have been an interesting and enlightening experience.

* * * * * * *

CONGRATULATIONS

Several Clark graduates have recently gained new positions within the profession and The Monadnock offers our sincere congratulations and wishes for continued success.

Floyd F. Cunningham (A.M. 1928, Ph.D. 1930) is now the Director of the Laboratory of Climatology at Southern Illinois University as Professor of Geography.

Charles N. Forward (Ph.D. 1958) has taken the position of Lecturer in Geography at Victoria College, Victoria, British Columbia.

Loren N. Gould (A.M. 1959) left the U.S.G.S. to become an Instructor at Worcester State Teachers College.

Salvatore J. Natoli (A.M. 1957) was recently promoted to Associate Professor of Geography at State Teachers College, Mansfield, Pennsylvania.

Robert F. Perry, Jr. (Ph.D. 1957) has taken the chairmanship of the Department of Geography at Worcester State Teachers College.

Louis O. Quam (Ph.D. 1938) was promoted from Head, Geography Branch to Director, Earth Sciences Division, Office of Naval Research.

Paul V. Salley (M.A. 1951) is now Associate Professor and Chairman of the Geography Department, Salem State Teachers College.

* * * * * * * *

OBITUARY

The Monadnock expresses extreme sympathy at the passing during November of last year of Eva E. Martens (M.A. 1944) late of Vero Beach, Florida.