

INDIANA UNIVERSITY  
DEPARTMENT OF GEOLOGY



NEWS LETTER No. 10

1961

Department of Geology

Indiana University

News Letter No. 10

Ralph E. Esarey, Editor

Contributors

C. W. Beck

J. B. Droste

D. E. Hattin

T. E. Hendrix

W. R. Lowell

Judson Mead

J. B. Patton

T. G. Perry

C. J. Vitaliano

W. D. Thornbury

Bloomington, Indiana  
June, 1961

John B. Patton,  
Chairman

## TOP SIDE NEWS FROM THE CHAIRMAN

A modern, streamlined undergraduate curriculum will be put into effect in September 1961 in order to permit inclusion of more advanced courses and thus give the undergraduate student a broader background without substantially increasing either the number of hours or the number of required courses.

A new course, G-105 Elements of Geology (5 credits), will replace G-101 Physical Geology and G-102 Historical Geology, and a new course, G-106 Minerals and Rocks (5 credits), will replace G-301 Mineralogy and G-302 Petrology. The course, G-412 Principles of Stratigraphy, will be dropped, and two new courses, G-334 Principles of Sedimentation and Stratigraphy (3 credits) and G-408 Structural Mineralogy (3 credits), will be added.

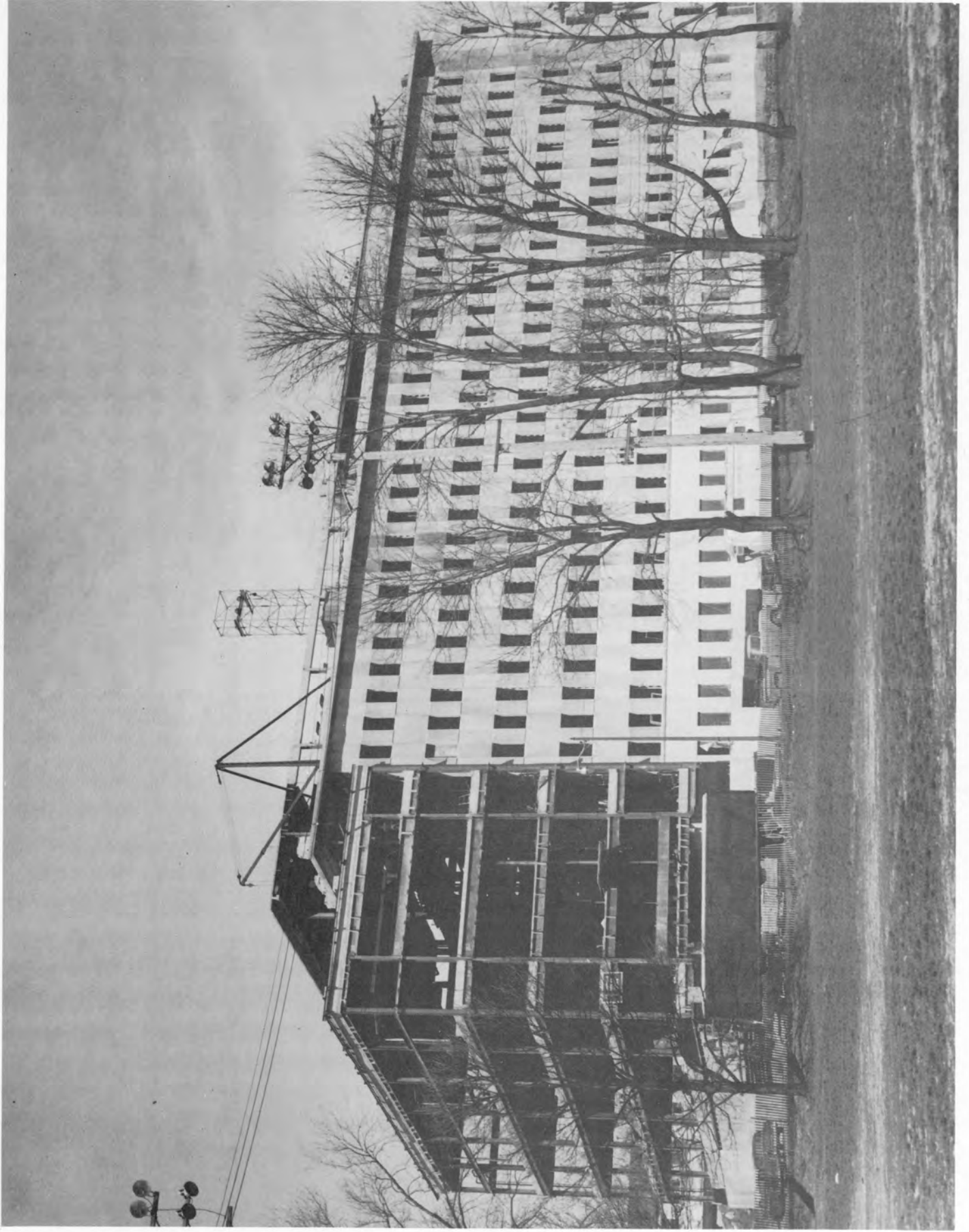
Students enrolled in course G-429 Field Geology in the Rocky Mountains may now receive 8 credits provided they travel with the caravan from Bloomington to the Montana Field Station and back, as all our own students do. Students who participate in the course only at the Field Station will receive 6 credits.

At the close of the regular camp session in Montana, a new 5-credit course, G-200 Introduction to Geologic Field Studies, will be offered for students who are not geology majors but who are interested in obtaining geologic training in addition to the elementary course that is prerequisite to the field course. Emphasis will be placed on observing and interpreting effects of gradation, vulcanism, and diastrophism.

A graduate course, G-510 Taxonomic Procedures in Paleontology, was offered for the first time during the current academic year, and a new course, G-516 Introduction to Coal Geology, has been approved. The latter course will be offered in alternate years and will be taught by Dr. Charles E. Wier, Head of the Coal Section in the Indiana Geological Survey.

The Department has received an unusually large number of applications from high-caliber students seeking admission to Graduate School. A strong trend toward more advanced training has converted us from a department whose graduate program was largely directed toward the master's degree to one in which most graduate students are working toward the Ph.D. degree. This means that our turnover in assistantships is appreciably slower. Fortunately our increased enrollment has resulted in additional stipends for Graduate Assistantships, and we therefore are still able to offer financial support to a fair number of promising new graduate students.

I am sure that many of you are interested in the progress being made on the new Geology Building. As you can see in the accompanying photograph, made the first week in April, the exterior masonry work is almost complete for the Tenth Street wing. The pouring of concrete is essentially completed, most of the partitions on the first and second floors are in, plumbing is roughed in through the fourth floor, and the heating and exhaust system is nearing completion except for installation of the induction units. The new building makes quite a change in the skyline as you gaze out the windows of the library in Owen Hall.



View of new Geology Building facing Tenth Street

The large Geological Survey family, which has been widely scattered in several buildings on campus, has recently received assurance of a home for all under one roof. The Indiana General Assembly saw fit to appropriate the funds necessary to initiate construction of a wing on the new Geology Building to house the offices and laboratories of the Geological Survey. Preliminary plans are now in preparation.

#### FACULTY ACTIVITIES

Professor Carl Beck is conducting the following pertinent research: continuation of the determination of the bonding mechanism of organic compounds to minerals, essentially surface chemistry; continuation of work on kidney stones, divided into the following categories - study of dissolution compounds, study of correlation of urinary sediments with types of kidney stones, study of geographical distributions of kidney stones as related to groundwater and soil composition; and with Ronald DeRudder, graduate student, a study of the mineralogy of the wollastonite deposits of Willsboro, New York.

Dr. Vitaliano reports upon the field of petrology and petrography. Richard Harvey has completed the requirements for his Ph.D. degree. His dissertation was a study of hydrothermal alteration of volcanic rocks in the Goldfield District, Nevada. This study was part of a project sponsored by a National Science Foundation grant to Dr. Vitaliano. Field work on the main project was completed in June, 1960, and laboratory work is now in progress.

There are unlimited opportunities for basic research in petrology in the area of the Montana Field Camp. A modest beginning has been made on the petrology of the igneous rocks of the region and a petrochemical study of the sills in Cottonwood Canyon is under way. During the Summer of 1961, Dr. Vitaliano hopes to start work on the older Precambrian rocks in that part of Montana.

Except for a week spent at the Indiana University Geologic Field Station in Montana in connection with the National Science Foundation Institute for Teachers of Geology, Professor Thornbury spent the summer working upon regional geomorphology of the United States. With good luck he hopes to have this done before he reaches retirement age. He attended the meeting of the Geological Society of America in Denver, in November, and while there re-visited the campus of the University of Colorado at Boulder, where he once taught.

Professor Hendrix is kept quite busy with his teaching assignments, handling Structural Geology, Physical Geology, and the laboratory work in G100 called Geology and Man. Enrollment in G100 was 550 students, an increase of 200 over last spring. Three teaching laboratories are kept busy all week (including Saturdays) and 14 graduate assistants are required to handle the horde of students. Dr. John Droste gives the lectures for this course and Professor Hendrix handles the laboratories. A new manual for the laboratory by Professor Hendrix has perked up the course.

For the first time in recent years, this spring members of the Structural Geology Club traveled to the Baraboo region of Wisconsin to study the classic exposures of minor structure developed on the flanks of the major Baraboo syncline. Ten students made the trip during April 21-23, with Professor Hendrix in charge.

Physical Geology, G101, is being taught for the last time as such. It will be blended with Historical Geology, beginning next year. However, enrollment in the class this spring is quite good, considering it is usually a first semester class.

Dr. John Droste has continued his research on the effect of super saline environments on clay mineral diagenesis with the support of a National Science Foundation Grant. He has begun a project to study the composition and origin of the minerals in paint pots, mud pots, and hot springs of Yellowstone National Park. He is also working with the assistance of graduate students on the sedimentary petrology of several stratigraphic units in the vicinity of the Field Station in Montana.

Professor Hattin has completed recently a guidebook for the "Falls of the Ohio" field trip that is to be held in conjunction with the 1961 Annual Meeting of the Geological Society of America. Also in the final-draft stage of preparation is a typescript on the stratigraphy of the Carlile Shale in Kansas which will be published, probably late this year, as a bulletin of the Kansas Geological Survey. Future research plans include Fall 1961 completion of a manuscript on the Graneros Shale of Kansas which will be co-authored by Craig Hatfield, graduate student of stratigraphy. A continuing program of Cretaceous investigations by Professor Hattin is supported by the Kansas Geological Survey.

#### TEACHING THE TEACHERS

Thirty-six high school teachers of science from across the nation will converge on Bloomington this July to attend a Summer Institute in Earth Science. This Institute is made possible by a grant from the National Science Foundation and will be in session from July 17 to August 25. Objectives of the Institute are: (1) to acquaint high school science teachers with the elements of earth science so that they may offer a formal course in the subject; (2) to make the participant's teaching more effective by impressing on him that a close interrelationship unifies all fields of science; and (3) to inspire Institute members to further their knowledge of earth science, either through private reading or by enrolling in formal courses. Professor T. G. Perry is Institute Director and is responsible for the coordination of its curriculum and the administration of the program.

#### ACTIVITIES IN GEOPHYSICS

Dr. Judson Mead reports that research work in Geophysics continued to be divided between Montana and Indiana during 1960. Alan Colville has completed his research on paleomagnetic studies in Montana and will be receiving his Ph.D. in 1961. Bill Hanna is continuing paleomagnetic studies in Montana.

with a detailed study of the Elkhorn Mountain volcanics. He expects to continue this work during the summer of 1961. Walter Burfeind has turned up ~~some~~ interesting gravity and magnetic anomalies related to the Tertiary Basins near the Field Camp in Montana. We hope to have the reflection seismograph busy again in the Montana area and will be taking advantage of the very generous gift of 250 small geophones from Texaco.

James Bloom, a graduate student in Geophysics, has been delving into the subject of synthetic seismograms. He is now completing a research project concerning the nature of seismic reflections from certain simple reflector distributions. He has made extensive use of the IBM 650 digital computer for this work.

Construction has just started on a new seismograph station located on the edge of the new University golf course northeast of the campus. This station is being built in cooperation with St. Louis University and will house six modern seismographs. Operation will start by July 1.

#### SENIOR TEACHING STAFF

Carl Wellington Beck, Professor of Mineralogy  
 John Brown Droste, Assistant Professor of Geology  
 Ralph Emerson Esarey, Associate Professor of Geology  
 Donald Edward Hattin, Associate Professor of Geology  
 Thomas Eugene Hendrix, Instructor in Geology  
 Wayne Russell Lowell, Professor of Geology  
 Judson Mead, Professor of Geophysics  
 John Barrett Patton, Chairman and Professor of Geology  
 Thomas Gregory Perry, Associate Professor of Geology  
 William David Thornbury, Professor of Geology  
 Charles Joseph Vitaliano, Professor of Geology

#### NON-ACADEMIC STAFF

Theodore H. Appleton, Accountant  
 Bernice Banfill, Administrative Assistant  
 Maynard E. Collier, Analytical Chemist  
 Herbert P. Dutton, Caretaker, Geologic Field Station  
 Ellen L. Freeman, Librarian  
 M. Joan Justus, Secretary  
 Charles S. Miller, Instrument Maker  
 William H. Moran, Chief Draftsman  
 Leonard Neal, Preparator  
 Marguerite E. Trisler, Clerk Typist

### JOURNAL CLUB PROGRAMS

Dr. John Droste served as chairman of the Journal Club Committee for the school year of 1960-61. There were two student members of the committee, Ronald Perkins, President of S.G.E., and Roger Cuffey, Faculty Award Winner. Similar to last year, each faculty member was responsible for two Journal Club programs. In several cases, graduate students prepared and presented the programs. The following speakers from outside the faculty or graduate students appeared at Journal Club, four of whom were A.A.P.G. distinguished lecturers.

- Dr. Ray Thorsteinson - Stratigraphy and Structure of Canadian Arctic Islands
- Miss Ellen Freeman - Use of the Library
- Dr. J. W. Wilson - Miocene Mirage
- Dr. R. W. Decker - (caught in a blizzard and did not arrive)
- Mr. J. Hanessian - Science and Government in Polar Areas
- Professor David G. Frey - Paleocology of Freshwater Lakes

### FIELD TRIPS

The annual field trip for petrology students and friends of petrology took place in early April. The Southern Appalachians were visited and the theme of the trip was "progressive regional metamorphism of geosynclinal sediments". Some of the famous mineral collecting localities were visited including Bruson City and Spruce Pine, North Carolina.

The annual regional stratigraphy field trip, under direction of Professor Hattin, this year involved 14 students. Participants compared stratigraphic and structural phenomena of the Ozarks, northeastern Oklahoma, Arbuckle Mountains, Criner Hills, Llano uplift, Marathon basin, Delaware basin, Sacramento Mountains, and southern Sangre de Cristo Mountains.

### VISITING FOREIGN SCIENTISTS

In April, 1960, Douglas S. Coombs, Chairman of the Department of Geology, University of Otago, Dunedin, New Zealand, spoke to the Journal Club on the geology of New Zealand, and lectured on the zeolite facies, the latest development in classification of low rank metamorphism.

In October, Dr. Charles A. Flemming, Paleontologist, New Zealand Geological Survey, Lower Hutt, New Zealand, visited the Department and with the kindness of Dr. Shaver of the Indiana Survey took advantage of the opportunity to visit the type locality of the Salem Limestone. Samples of the dwarf fauna were taken for the collections of the New Zealand Survey.

In November, Professor Robin A. Clark, Chairman of the Department of Geology, Victoria University of Wellington, Wellington, New Zealand, spent two days in the Department and talked to the Journal Club on the basaltic rocks of New Zealand. Dr. Clark also told the group about some aspects of the work of the New Zealand geologists in Antarctica.



## VISITING PROFESSOR

Professor R. W. van Bemmelen, of the University of Utrecht, The Netherlands, gave a series of lectures in the Department. Professor van Bemmelen was sponsored by the American Geological Institute through the Visiting International Geoscientist Program of the National Science Foundation. He has distinguished himself in the fields of structural, stratigraphic, mining, and economic geology. He is considered an authority upon the geology and structure of the island arcs of Indonesia. His lectures included the following topics:

Geology and Structure of the Islands of Indonesia  
 The Theory of Gravity Tectonics  
 Relations Between Volcanism and Human History in  
 Central Java  
 Volcano-Tectonic Collapse Structures in Java and Sumatra  
 New Views on East-Alpine Mountain Building

## GEOLOGY IN EXTENSION

For the third consecutive semester a course in Physical Geology is being offered at the Extension Center in Indianapolis. Mr. George Brown, a Doctoral candidate in the Department, is handling the lecture and laboratory sections of the course. The course has not attracted members as well as we had hoped, but with continued efforts it may come into its own.

## FACULTY AWARD WINNER

Roger Cuffey, a Bloomington boy whose father is Professor of Astronomy here at Indiana, won the Annual Geology Faculty Award for pre-eminence in academic work prior to his senior year. Roger is a major in the Department, of course, and intends to attend Graduate School and work toward the Ph.D. degree. Roger also received the Tar Award from Sigma Gamma Epsilon as the outstanding undergraduate major in Geology.

## LIST OF VISITS FROM OIL COMPANY PERSONNEL

During the past school year, the following men visited the Geology Department and interviewed students with respect to present or future employment.

Dr. M. G. Frey, The California Company  
 Mr. P. H. Bursk, Shell Oil Company  
 Mr. G. B. Adams, Shell Oil Company  
 Dr. C. C. Nathan, Texaco, Inc.  
 Mr. M. W. B. O'Heran, Texaco, Inc.  
 Mr. B. L. Bass, Texaco, Inc.  
 Mr. L. E. Reilly, Chevron Oil Company  
 Mr. W. R. Bloomfield, Standard Oil Company of Texas  
 Mr. E. J. Smith, Standard Oil Company of Texas  
 Mr. D. A. Miles, Standard Oil Company of California

## GEOLOGIC FIELD STATION IN MONTANA

The Geologic Field Station was utilized to capacity during the summer of 1960. The regular summer field course, G429, and a National Science Foundation sponsored Institute in Field Geology for College Teachers of Geology were conducted simultaneously. The Field Station was expanded in the summer of 1959 by the addition of five buildings in order to lodge and feed the nearly 100 people who were to be accommodated there in 1960. Forty students were enrolled in the regular field course, 17 from Indiana, 8 from Montana, and 15 from other universities and colleges.

Scholarships of \$200 each for the Summer Field Course were awarded to Patricia Nassoioy of Syracuse University; Michael Piburn of the Davis Branch, University of California; Stanley Riel of the University of New Hampshire; Lee Suttner of the University of Notre Dame; and to Lawrence Taylor and Joseph Willman of Indiana University.

The research program continued to expand in 1960 with six graduate students working on field problems for Master's and Ph.D. degrees. Benjamin Richard continued areal mapping on the Tertiary sedimentary rocks. Mark Reshkin began a geomorphology project. In the field of sedimentation, Sambhudas Chaudhuri started a sedimentation study of the rocks adjacent to the Cambrian-Belt series contact, and Lawrence Lebauer began work on the Wolsey-Meagher formations. Research in geophysical problems at the camp is listed by Dr. Mead under faculty activities.

The faculty at the Field Station included Professors Droste, Hendrix, Lowell, Mead, and Vitaliano from Indiana University; R. C. Gutschick from Notre Dame; and Fred Honkala from Montana State. John Cleveland, Alan Colville, Barry Haff, and John Utgaard, graduate students at Indiana University, assisted in the teaching program. A new experience was provided for the students when they were conducted over the 1959 West Yellowstone earthquake and Madison River slide areas.

Professor Patton, Department Chairman, visited the Station for both the opening and closing of the program. Dean Ralph Collins, Claude Black, Vice President J. A. Franklin, and J. W. Hicks made a flying trip in the University's plane to inspect the Field Station. As a result of their recommendations, new construction and remodeling of two dormitories will be done in the spring of 1961.

### NATIONAL SCIENCE FOUNDATION INSTITUTE IN FIELD GEOLOGY FOR COLLEGE TEACHERS

An Institute in Field Geology for College Teachers of Geology, supported by a grant from the National Science Foundation, was conducted by the Department of Geology at the Field Station from June 17 to July 28, 1960. The thirty participants, chosen from 105 applicants, represented 19 states. Professor Wayne Lowell served as director of the Institute and Professor Raymond Gutschick was assistant director in charge of the teaching program. Field Station faculty were utilized in the Institute teaching as much as possible. The Institute was enhanced by visiting lecturers who were well known for their work in some phase of geology. Each lecturer visited for one to three days

and gave one or more lectures and conducted a field trip. The visiting lecturers included:

Professor Christine L. Balk, New Mexico Bureau of Mines, Cambrian Stratigraphy  
 Professor D. S. Coombs, University of Otago, New Zealand, Metamorphic Rocks  
 Mr. Robert Ingersol, Anaconda Mining Company, Mineralogy of the Butte Copper Mines  
 Dr. Montis Klepper, U. S. G. S., Tertiary Volcanics  
 Professor Adolph Knopf, Stanford University, Igneous Petrology  
 Mr. E. D. McKee, U. S. G. S., Mississippian Stratigraphy  
 Professor William McMannis, Montana State College, Belt Stratigraphy  
 Mr. Melville Mudge, U. S. G. S., Areal Geology  
 Mr. G. D. Robinson, U. S. G. S., Tertiary Stratigraphy  
 Mr. Clyde Ross, U. S. G. S., Belt Stratigraphy  
 Professor W. D. Thornbury, Indiana University, Geomorphology  
 Mr. Irving Witkind, U. S. G. S., West Yellowstone Earthquake

The participants were enthusiastic about the Institute program and strongly recommended that it be continued in future summers. Another Institute project for the summer of 1961 was submitted to the National Science Foundation and was approved early in December. Preparations are now under way to make it even more successful than last summer's Institute.

A new course will be offered at the Field Station next summer. The Department of Geology will offer a 5-credit course, G200, Introduction to Geologic Field Studies, to be taught at the Field Station. The course will be of four weeks' duration, from July 30 to August 26, and will include lectures, laboratory, and field studies of minerals, rocks, and rock folding and faulting. Two 4-day trips will be taken, one through Glacier National Park, and the other through Yellowstone National Park, the Grand Tetons, and the West Yellowstone earthquake area. The prerequisite for this course will be one beginning course in General Geology, Physical Geology, or Historical Geology. The overall cost for each student will be \$222.00, which includes tuition, board and lodging, field transportation, and insurance exclusive of the cost of round trip transportation from home to Whitehall, Montana. The course has been established primarily for Indiana University students, but some students from other universities and colleges will be accepted.

#### GEOLOGY DEPARTMENT LIBRARY

Miss Ellen Freeman, Librarian for the Department, reports a steady growth of the library through the acquisition of 1421 volumes and 3684 maps. Bound serial volume and book holdings now total approximately 24,400, and map holdings 38,600. The reprint collection, just five years old, contains approximately 1200 titles, primarily from journals to which the Geology Library does not subscribe. Contributions of useful reprints from faculty and staff members, students and alumni, are always welcome.

Dr. Deiss's library of some 200 monographs, 1500 reprints and pamphlets, and 2000 serial issues, has been given by Mrs. Deiss to the Department. It is gradually being incorporated into the Geology Library.

Among the serials in Dr. Deiss's library are several very long and complete runs. These sets, together with some of the monographs, have been processed to form the nucleus of a library for the Field Station. During its first season, 1960, when it contained approximately 400 items, including about 24 sheet maps on loan from the Geology Library, the Field Station Library was used sufficiently to indicate that its creation and maintenance is worthwhile.

Miss Freeman adds that the large north windows of the Geology Library afford interested spectators a splendid view of the construction of the new geology building.

#### SIGMA GAMMA EPSILON

Rho Chapter of Sigma Gamma Epsilon, National Earth Science Fraternity, has 36 active members at the present time. They are: Edward Berg, James Bloom, George Brown, John Bubb, Roy Butler, Sambhudas Chaudhuri, John Chute, John Cleveland, Steve Cohen, Roger Cuffey, Ronald DeRudder, Tjiang Gan, Arch Girdley, Barry Haff, Donald Hallinger, Craig Hatfield, Gene Heien, Thomas Hirschmann, Amanollah Izadpanah, Gerald Johnson, Lawrence Labauer, George Leckie, Jerry Lemmons, Michael Mound, Warren Nelson, Marshall Parry, Ronald Perkins, Gordon Pirie, Benjamin Richard, Ted Ross, Edward Self, Lawrence Taylor, John Utgaard, and Joe Willman. Professor Ralph Esarey is the faculty advisor. Plans for a spring initiation are underway.

The chapter has sponsored the "Coffee Call", held every Monday and Wednesday afternoon, which has afforded faculty and students an opportunity to meet informally and discuss subjects of interest. The "Fall Frolic" in early October and the "Rustic Romp" in February were very successful. The organization held a banquet during the Christmas season at which the traditional skit of faculty idiosyncrasies was presented. The social calendar will close with a spring picnic at Lake Lemon.

Members of SGE have presented programs before Journal Club, a weekly meeting of geology faculty and students. Thomas Hirschmann spoke on the geology of Guatemala and Tjiang Gan presented a synopsis of the geology of Indonesia. More programs are planned for the spring semester. In addition the organization is working on a proposal to publish a geologic map of Indiana with the highway system included. This map will be of interest to geologist and layman alike and will be distributed at a moderate fee.

#### G. S. A. MEETING IN DENVER

Tom Heistand made arrangements for the Indiana University Luncheon at Denver and believes the 34 persons present set a new attendance record for one of these functions. The following alumni and faculty were in attendance:

John B. Patton  
Michael C. Mound  
Richard B. McCammon  
T. G. Perry

Ronald DeRudder  
Patricia DeRudder  
John Utgaard  
Charles Vitaliano

## Alumni and faculty in attendance at G.S.A. Alumni Luncheon (Continued):

T. C. Heistand	R. C. Gutschick
Agnes Heistand	Mark Reshkin
Alan A. Colville	Steve Theodosis
J. J. Galloway	Georgia Theodosis
Robert P. McNeal	W. D. Thornbury
Paul Dean Proctor	Phyllis Scudder
Charles E. Wier	Maurice Biggs
Wayne R. Lowell	Lawrence R. Lebauer
H. H. Bradfield	John B. Droste
Ralph L. McDonald	James T. Stanley
Carl W. Beck	Frank E. Kottlowski
Seymour Greenberg	Ben Richard
Judson Mead	G. K. Guennel

## A. A. P. G. MEETING IN DENVER

Luncheon in the Petroleum Club of Denver was arranged for the Indiana University alumni and faculty by Tom Heistand. Attendance was fairly good, although we didn't set any records. A card was signed by the group and mailed to Dr. Galloway. The following persons attended:

H. H. Bradfield	Charles Passell
W. A. Thomas	Maurice Biggs
Robert R. Shrock	Ray Robbins
T. C. Heistand	Elmer Lucas
Agnes Heistand	Walter Spangler
Caroline Kierstead	Ralph Esarey
James T. Stanley	Lawrence R. Lebauer
Galen Shirley	Ronald D. Perkins
Ned M. Smith	John B. Patton
Jack Sunderman	Gerald Carpenter
John B. Droste	Shirley Carpenter
Gary R. Gates	Dee Rarick

## THE EDGAR ROSCOE CUMINGS - CLYDE ARNETT MALOTT MEMORIAL FUND

Dr. Robert R. Shrock, Chairman of the Department of Geology at the Massachusetts Institute of Technology, arranged with the Indiana University Foundation for the establishment of the above fund. Dr. Shrock made the first contribution so as to bring the fund into existence.

Dr. Shrock requested that the principal of the fund be preserved as a permanent endowment, and that the annual income from the fund be made available to the Department of Geology at Indiana University for such use as the Chairman of the Department and his departmental colleagues might consider appropriate in the support and encouragement of superior work by staff and students in the geological sciences. He hopes that ultimately the income will be large enough to make possible a scholarship or fellowship for an outstanding student.

You may send your contributions (check or securities) to the Indiana University Foundation, Bloomington, Indiana, designated for the Cumings-Malott Memorial Fund.

#### DEISS MEMORIAL FUND

This fund was established shortly after Dr. Deiss's death, which awards two tuition scholarships for the Indiana University Geologic Field Station for the Summer Field Course. The recipients will be outstanding undergraduates, one from Montana and one from Indiana, who will be enrolled in the field course. Contributions to the fund may be sent to the Indiana University Foundation and marked for the Charles Deiss Memorial Fund.

#### GEOLOGICAL SURVEY NEWS ITEMS

The following Indiana University "Old Grads" are working for the Geological Survey:

Charles E. Wier	Gary R. Gates
G. K. Guennel	Dan M. Sullivan
Harold C. Hutchison	Jack L. Harrison
Richard K. Leininger	Seymour S. Greenberg
R. Dee Rarick	Ned M. Smith
Stanley J. Keller	Thomas A. Dawson
Arthur P. Pinsak	Gerald L. Carpenter
Maurice E. Biggs	Andrew J. Hreha
William J. Wayne	Howard Smith
Albert J. Rudman	Gerald S. Woodard
Joseph F. Whaley	

Charlie Wier was elected Chairman of the Group on Coal Geology of the G.S.A. during the organization's annual meeting in Denver last November.

Miss Sally Ann Harrison, born February 10, 1960, adopted the Jack Harrison family early last spring. On January 30 of this year her young brother, Master Steven Dale, was born.

A new daughter arrived at the home of Maurice and Jean Biggs early this year. Miss Judith Ann Biggs was born on January 18.

Art Pinsak, one of the last staunch bachelors of the Survey, succumbed to the lure of marital bliss on December 27. Mrs. Pinsak is the former Sharon Ann Bishop of Evansville. The Pinsaks reside at 324 North Roosevelt in Bloomington.

## NEWS OFF THE CAMPUS

John Heckard, '60, is working with the Water Resources Commission of the State of Indiana. He also is trying the get-rich-quick scheme of drilling a few wildcats. No report upon his luck.

Kenny Vance was transferred from Geophysics to Exploration and is handling Western Montana for the California Company.

Henry Thomas of the '50 class is special agent for the FBI in New York City. He robbed the Eastern Airlines of a first-class stewardess about three years ago by marrying her. He sends his regards to his classmates and the faculty.

Arthur Moore, Class of '22, (getting to be an old-timer) is now in the real estate business in Brown County. Can't tell what these geologists will get into.

Jim Smith reports from sunny California that he is at work as an Engineering Proposal Specialist on solid and liquid rocket propulsion systems for Rocket dyne. After three daughters he claims to have given up hope of a male heir.

Jim Harris lives at Elberfeldt, Indiana, and is President of N. & H. Developments, Inc. Has four boys -

Dale Kline's family still consists of only ~~eight~~ ~~members~~, four now in school. He is working half time for the California Research Corp. He says the Owen Hall gang has dwindled to Chris Christensen, who lives in Bakersfield, Diz Dean, who commutes out of ~~Shorey~~ and Jack Barr and Bert Hale in La Habra. Jay Leith, former faculty member, has left the Standard of California.

Mrs. Miriam Mayes Sigmund lives in Columbus, Indiana, R. R. 5.

Art Brookley is doing a fine job with International in Colombia, S. A. He writes many interesting letters about his work and is helping set up some other labs in palynology.

Helen Beikman writes from Menlo Park, California, that she has finally acquired the GS two and a half rating, whatever that is. Congratulations!

George Yurkas writes from Crane, Texas, and hopes to get back on the campus this summer.

Wilbur Winter is moving from Trail, B. C., to Spokane, Washington, but will still be employed by the Consolidated Mining and Smelting Company. He has three children--Andrea, the youngest, only six months old.

Jim Batchelor left Marion, Indiana, for Lake Charles, Louisiana, where he is teaching geology at McNeese State College.

Lester Logue continues to be a successful geologist and producer at Dallas. He was responsible, in part, for the excellent luncheon for the alumni at the A.A.P.G. meeting two years ago. He has just moved into a new home on Hillcrest Road.

Jack Wells is still in Caracas and wonders what happened to the I. U. Basketball Team. We do, too.

Ray Robbins of Trigood Oil is drilling a well, currently, in California and commutes from Casper. Good luck! Betty and Ray were on the campus last summer for a short visit.

Marvin Warner is a seismologist for Shell in Durango, Colorado.

Jim Koenig works with the California Division of Mines out of San Francisco. He likes the work, the people, and the climate.

The Don Wirth family increased by one girl since the last newsletter. Don is working for the Department of Interior, out of Portland, Oregon, as a cadastral surveyor. He reports that Dick Beckman is working for a New Jersey Zinc Company in northeastern Iowa.

Norbert Parker is Vice President of Carpc-Kewanee, Assistant to the Executive Committee of Kewanee Oil Company, and Vice President of the Electra-frac Corporation. He spent a few hours in the Department and Survey as part of a business trip.

Bill Von Osinski works out of Amarillo, Texas, for Hamilton Bros., Inc.

Steve and Georgia Theodosis send their regards from Broomfield, Colorado. They were at the A.A.P.G. convention at Denver.

Mary Payne, with the Sun Oil Company in Corpus Christi, has a daughter ready to graduate from high school. Mary claims she is still enjoying her paleontology of the Gulf Coast section.

Jack Pickering received his Ph.D. degree in January. He is presently doing research work under a National Science Foundation Post-Doctoral Fellowship. Further plans are indefinite.

W. K. Summers is Geologist with the Ground Water Branch of the U.S.G.S., operating out of Madison, Wisconsin.

Ray Parker of the U.S.G.S. at Denver attended the G.S.A. convention and the A.A.P.G. meetings, also.

Dick Fitch lives in Santa Fe where his wife is Head Dietitian at the St. Vincent's Hospital. Dick is working with ores and metal mining; everything, he says, but what he studied to go into.

Olin Holt, working with Birdwell, reports another daughter as of November 14, 1960.

Ward Collins has been made General Superintendent of Underground Storage for Citizens Gas of Indianapolis. Lowell Gladish, ex '59, is working as Geologist for Citizens Gas and Coke.

Joe St. Jean attended the Congress in Copenhagen. He visited with Gordon Grender afterward in Norway and spent some time in London and Scotland.

Lora M. Baker, who taught geography in the Department some years ago, is retired and living at Hartford City.



John R. Reeves, former member of the Geology Department, retired from Cities Service on March 31, 1961. He will be living at Boca Raton, Florida. Your editor took work under Bob while a student at Indiana. The Department extends its congratulations for a long and distinguished career in petroleum geology and hopes you will visit with us in the near future, Bob.

Paul Simpson is interested in the Malott-Cumings Memorial Fund and the new Geology Building. For a general answer, we suggest that you write the I. U. Foundation concerning the fund and visit the campus and let us show you the new building.

To Jack McIntosh and the rest of the alumni, we are certain the basketball team and coach did the best they could. It was a disappointing season but not due to lack of effort.

John Organ's daughter, Sally, informs us that John is still traveling in Europe but will return this June. Son Jack is geologist for the Peabody Coal Company in Kentucky.

Jerry Hennessy is geologist and drilling superintendent for the Stouder Drilling Company in Evansville. Jerry has three boys and two girls who keep him real busy.

John R. Taylor, Cincinnati, is correct that we are inviting all the alumni back to the dedication of the new building. We can't set a date yet, but we will let you know. Please plan to come.

Charles G. Daily, Indianapolis, '98, must be one of our oldest alumni. His interest in geology keeps him reading about developments in the field. We hope to see him at Commencement.

Dave Mathews and wife report a new daughter as of November 4, 1960. Dave works for Texaco at Jackson, Mississippi.

We were glad to hear from George Whitlatch. He is with the Georgia Tech. Engr. Exp. Station, Industrial Development Branch, at Atlanta, Georgia, doing research.

Charley Solbrig informs us, a little late, that a daughter arrived last May (1960), Carol Elizabeth. Charley is with the Portland Cement Association, working out of Des Plaines, Illinois.

Bill Jenkins, High Point, N. C., reminds me of some ancient history about basketball. It's hard to live down the past.

Bob Saenger is senior computer with Texaco at Ardmore, Okla. He invites members of the Department to come down and go fishing and hunting.

John Huddle says he is one year older and will return to the study of paleontology and stratigraphy, his first love. We enjoyed John's hospitality at Atlantic City.

Bruce Bohor is still at Ponca City working for Continental.

Alan Rommel expects to enter medical school this fall at Washington, D. C.

Bill Kaschube announces the arrival of Sandra, a daughter, on July 7, 1960. Bill and Harriet now have two girls. Bill is still with Bell Brothers at Robinson, Illinois.

Mrs. Janet Wert Crampton sends her regards to all personnel remaining from her time. Her husband is now a Major, stationed at Ft. Belvoir, Virginia.

Richard Bowen is with the Spanish Gulf Oil Company in Spain but working in the Spanish Sahara. He claims deserts are hot at night as well as day. The family is in Australia, where he hopes to join them soon.

Claudia Miller Hooker, now 77 years old and retired, lives with her husband in New Washington, Indiana. She taught for 35 years, spending some time in western Colorado.

Everest Wible is now in Wichita Kansas, working as Exploration Manager for O. S. Sutton.

Don Newsom reports a new arrival, a girl, some months ago. He is stationed at Shreveport with Texaco, doing geophysical work in North Louisiana.

Dick Berry recently accepted a position with the California Company, effective in February of this year.

Rex Rader is engineering and geological supervisor with Indiana Oil Purchasing Company in Tulsa, Oklahoma.

John Ransford is teaching at Mt. Vernon, Indiana, and announces the arrival of a son, Martin Andrew.

Bennie Edwards is still in the exploration section of the California Company at Jackson, Mississippi.

Kenny Huff is in Williston working for Core Laboratories.

Dick and Helen McCammon live in Grand Forks, North Dakota, where Dick has been teaching in the University. However, he has accepted a job with the Gulf Research Laboratory in Harmarsville, Pennsylvania.

Howard Tipsword sends his regards to Professors Patton and Galloway. He comments on the old days of Bock Beer and home-made gin.

Frank Green, one of our older alumni, retired from the Missouri Survey in 1958 and subsequently spent some time in Iran along the Russian border looking for water supplies.

Paul Kelly went independent as of this year and will be located in Bismarck. Paul was Division Exploration Manager with Calvert Drilling Company.

Ferol Fish is still with the New Jersey Zinc Company at Palmerton, Pennsylvania.

Glen Bartle, President of Harpur College, writes that they have had no new babies since 1927. How many grandchildren?

Dick Horton still likes the Shell Oil Company and Oklahoma City.

Conrad Gravenor attended the congress at Copenhagen, on leave from the Research Council of Alberta.

John Smith works for the Georgia Kaolin Company and lives in Macon.

Ronald Ogle works for Mobil Oil Company out of Beeville, Texas.

Elmer Wegner, one of our older grads, has been a salesman most of his career up to date. He lives in Glen View, Illinois.

Carl Myers announces a new daughter, Jennifer Lu-an, who was welcomed by two much older brothers. Carl is in the Air Force at Bunker Hill, Indiana.

Homer Brown, Director, and Jack Osborne are still operating the Division of Oil and Gas at Indianapolis. They recently moved into the new State Office Building.

Gene Taylor has completed ten years with the Union Producing Company at Jackson. Gene expects to run for mayor in a short time. Bennie Edwards is the only alumnus keeping him company in the City of Jackson.

John Uhl is still with the Division of Water Resources, Department of Conservation, Indianapolis.

Robert Laney writes from Midland that he is enjoying his work as a geophysics computer for Texaco.

Bob Sargent is still working for American Metal Climax.

On February 20, Dr. E. R. Cumings celebrated his 87th birthday and is in reasonably good health.

Charley H. Orahoad of Kingman, Indiana, wrote in to offer a collection of Indiana State Geological Reports to the Department. We are grateful and will avail ourselves of any volumes the library lacks.

W. O. (Bill) Allen sent in a very friendly letter expressing his appreciation for the year of graduate work at Indiana. Bill is in business for himself at Oklahoma City.

Bert Renzetti is General Manager of the Cerro Corporation at Santiago, Chile. Apparently Bert and Phyllis will be living in South America for some time.

Dick Wiley makes a living in Honolulu as a photographer but still retains much interest in geology. However, employment for geologists in Hawaii is almost nil.

Frank Olson gave up geology for the selling end of the business. He resides at Lawrenceville, Illinois, and records a new boy just four months old.

In September 1960, Dwight Mauck was promoted to Division Exploration Manager for the Pure Oil Company in Houston, Texas.

Don Buchholz married Joyce Chapman of Norfolk, England, last April (1960). What he needs now is a rise in the price of gold. Congratulations and best wishes.

Mr. and Mrs. Orville Bandy visited with the Vitalianos in Copenhagen last summer. He hopes to be on the campus for a short time this summer.

Marlan Boultinghouse is employed by the Anaconda Aluminum Company at Terre Haute. Mark Thomas was born on March 29, 1960.

Wes Bicking retires from the Air Force in July and plans to retire to Riverside, California, and grow oranges.

Martin Prinz expects to finish his Ph.D. at Columbia this summer and take a teaching position at Tufts University this fall.

Phyllis Scudder wrote a very interesting letter on the expansion of the Geology and Geography Departments at Youngstown University. Phyllis expects to marry Owen Marsh, geologist with the U.S.G.S., during the summer and live in Florida afterward.

Tom Straw is working for Humble in Kentucky. His present address is Campbellsville.

Our sincere congratulations to Arch Addington upon an outstanding career in the teaching of Earth Sciences. Fresno College can well be proud of him and his record. Arch retired last summer and expected to work part time in the field of Masonry. We hope Arch and Mrs. Addington have many happy years of leisure and enjoyment of their children and grandchildren.

Eula McEwan is enjoying an active social life at Lincoln, Nebraska.

Ray Hunt is Southwest Region Development Geologist with the Cities Service Company, living at Midland. Ray made two trips to Big Bend National Park during the past year. Must have an interesting job.

Wava Line Hummel is teaching at the Naval Base School at Guantanamo. As she states, this is really a hot spot, but very interesting. A son is attending Iowa State. Sorry we missed her when she visited the campus last summer.

Walt Spangler sent in this very clever announcement in the form of a theatre ticket: (Guatemala City, Guatemala) "Judy and Jeannie Spangler present 'It's a Brother', starring Jeffrey Kent; produced by Walt and Estella Spangler; directed by Dr. Humberto Montenegro; bedside seat, Roosevelt Hospital; the Star may be sleeping, however."

Don Cameron is still with the California Oil Company in the exploration department.

Jacob Baker's father (I think) mailed back the card stating that Jacob is in the U. S. Army, stationed in Germany. His enlistment is up in July.

Ruth Kiper is still teaching at Boonville, Indiana.

Roger Battin is still single and teaching in the Geology Department at the University of Wisconsin.

Bill Moll practically wrote his life history on the card. He married Patricia Strickland in December and is now teaching at Washington University and working on his Ph.D. thesis.

We will look forward to seeing Dallas Flandt and his family this summer when they visit the campus.

Martin Nading, '30, reports the arrival of a granddaughter. Martin had a coronary occlusion about a year ago but is now working again. He is Recreation Director for the City of Ft. Wayne.

Bob Sublett has been President of the Indiana-Kentucky Geological Society and still works for W. C. McBride in Evansville.

Joe Duhon is teaching at Griffith, Indiana, but probably will be in Nevada next year where he can see some geology.

John Davenport is serving his four years with the Air Force. He visited Pat Arken Gerdson and Helen Beikman. The card was mailed from Wichita.

Kenny Waters reports no changes in his family, three girls and one boy. He is with Hope Natural Gas and enjoying his work. He saw Sorgenfrei, Fowler, Lucas, and Flandt at a recent meeting.

Bob Myers is in the Research Department of the Perfect Circle Company at Hagerstown, Indiana. He believes geological training fits in quite well with work in metallurgy.

Frank Allen, retiring Director of Athletics, was recently honored as the man of the campus contributing most to the University during the year of 1960. Congratulations to Frank!

Tom Heistand did an excellent job with the Alumni Luncheon at the Denver meeting of A.A.P.G. He also put on a similar luncheon for the G.S.A. last fall.

John Kipta moved to Munster, Indiana, where he is doing general contracting.

The Robert and Marianne Cullers announce the birth of a daughter, Wendy, on August 5, 1960. Bob is teaching at Vevay.

Don Burditt and family visited field camp last summer after school was out but the Duttons entertained him. Several faculty members out there would have enjoyed visiting with him.

Wes Williams lives at Rolling Hills, Greenville, Kentucky, and we understand he is also rolling in that green stuff which accumulates from successful operation in the oil industry.

Preston McGrain is Assistant State Geologist of Kentucky and hopes any of you will stop in when the opportunity presents itself.

George Brunton is still with Pure at Crystal Lake, Illinois.

We once thought Lewis Childs was a confirmed bachelor, but he writes from Knoxville, Tennessee, listing four children from 13 to 7 years of age. Our congratulations!

Karl (spelled with a K) Frielinghausen reports the birth of twin girls on Valentine Day. This event produced numbers 4 and 5, all girls. Make your own comments.

Jack and Carolyn Baker reside in Madison, Indiana, where Jack is teaching earth science and math. They have two children and are currently expecting the third.

John K. Rose writes from Washington that he is happy with the attention the new administration is giving natural resources.

Hubert Latimer, District Manager for the Sun in Evansville, is doing a Bang-Up Job. We attended the Evansville Charity Ball at Xmas with the Latimers and Stouders.

Herbert Merrill, Associate Professor of English at Wittenberg University, along with his two daughters spends his summers in the Precambrian on Keweenaw Peninsula. If he keeps this up, he may revert to a geologist yet.

Joseph C. Holm, ex '25, has been farming for about 36 years and is now retired from active work. He worked on the Indiana Survey under Dr. Logan with the writer.

We missed Don Triplehorn at Denver. He is teaching at Wooster College and hopes to complete his thesis this summer.

Robert Stouse reports a third son in the family, Timothy Mark; born on October 18. Bob is consulting out of Mt. Carmel.

Wayne Erickson was transferred to Wichita Falls, Texas, where he will carry on exploration work for Gulf.

Jim Powell is Chief Geologist for the Hooker Chemical Company at Columbia, Tennessee.

Tom Mooney is Vice President and Plant Manager for Jergens-Woodbury at Burbank, California. With all four children (one set of twins) in college, Tom must be a very busy man.

Glen A. Lee is still living at Park Ridge, Illinois, doing substitute teaching and lecturing.

Ed McKay is "on his own" and living in Robinson, Illinois. He has three boys who make life pretty lively. He often sees Bill Kaschube who works for Bell Brothers in Robinson, also. An invitation is out to any alum who might wander in.

Paul Raymond, '55, recently married Karen Harden of Kerrville, Texas. Paul was transferred from Dallas to Midland where he is doing Trans-Pecos geology for Texaco.

Brice Smith is Status Quo--teaching in Monmouth High School in Adams County, Indiana.

John E. Brueckmann is studying at the Baptist Theological Seminary at Denver, Colorado, and hopes to go, eventually, to Southwest Asia as a missionary.

Samuel Schwartz is working at Parkview Hospital in Fort Wayne, Indiana, and plans to do graduate work in Business Administration this fall.

Jack Stangle, Lt. JG U. S. Navy, Submarine Force, is based at New London, Connecticut. He expects to spend two years with the fleet and then go to nuclear school to qualify for nuclear submarine duty.

Gary Wirey is working as a consulting geologist out of Princeton, Indiana. He has two daughters, three and one years old. He is now looking for hot spots in the tri-state area.

Dave Berendsen is working as a Traffic Supervisor for the Southern Bell Telephone Company in Baton Rouge, Louisiana.

Vic Olson has been transferred to Houston, Texas.

Jim Frugoni is with the Robert Ray Geophysical Corporation, working out of Tripoli, Libya.

Courtney Waddell is Staff Engineer with Lane-Wells in Houston.

Bill Thomas, Ohio Oil Company, one of our very loyal alumni, toured Europe last summer after attending the International Congress.

Jack Northrup is Research Metallurgist with Narmco Research Development Company in San Diego.

Congratulations to Don Cameron who received the Louisiana Petroleum Council's Silver Award for outstanding work in the oil industry's public and government relations program.

Mrs. E. S. Martin (Viva Dutton Martin), now retired, sends her regards from Santa Barbara, California.

Wayne Bundy is Director of Laboratories for the Georgia Kaolin Company at Elizabeth, New Jersey.

Carroll Roberts works for the Bryant Manufacturing Company as technical writer in Indianapolis, Indiana.

George Winston is now stationed at Billings with Humble doing stratigraphic work. He notes that Ray Battin is in Humble's Oklahoma City office and that John Wall is with the Alberta Research Council in Edmonton.

Kenny Riggs works out of Billings for the California Company. He and Jane have a daughter born January 8, 1960.

Robert L. Jones lives in Rawlins, Wyoming; according to R. D. Jones of Anderson, Indiana.

Bob Kidd is now Chairman of the Board and Chief Executive Officer for the same company, but its name has been changed to Cities Service Petroleum Company. They recently absorbed the Arkansas Fuel Oil Organization. Headquarters are still at Bartlesville.

Paul Dean Proctor, Head of the Geology Department at the Missouri School of Mines, sends his greetings. He has four boys, ages from 4 to 15. He met Professors Lowell and Vitaliano in Europe last summer.

L. M. McLemore, of the Class of '38, is Production Superintendent of the Foam Rubber Division of the U. S. Rubber Company at Mishawaka, Indiana.

Mrs. Pauline Hunter is teaching at Portland, Indiana. Her son took his Ph.D. degree at Michigan State and is now at Wheaton, Illinois.

L. H. Seamon lives in Washington, D. C.

Lee F. Bennett, perhaps our oldest alumnus, writes that he is 88 years old, not an invalid, eyesight is good, and gets around fairly well. He is a 50-year member of A.A.A.S. Lives in Kenosha, Wisconsin.

Noel Bailey has been practicing obstetrics and gynecology at Ft. Worth, for 20 years. His hobby is raising Hereford cattle. He has a son in TCU.

A very complimentary letter about the Newsletters comes from Delmer L. Elston of Aurora, Indiana. Delmer is completing his eighth year with National Lead in the Research Department. Besides Mrs. Elston, the family consists of two boys and a girl, and the boys are already collecting fossils on the farm where they live. Claims he hasn't seen a classmate in 10 years, the Newsletter being his only contact.

Dean and Carol Pennington write that Libya "ain't Indiana", but living along the ocean has some pleasures and advantages. Skin diving and spear fishing are the principal sports. Warren and Marcella Heisterkamp also live in Libya and visit often with the Penningtons.

Bob Grosjean is Senior Vice President and a Director of the Mound Company in Houston. Bob has just returned from a business trip to Mexico.

The contingent of geologists working for the Northern Indiana Public Service Company includes Jack Conley, Bernard Parlock, Neil Schamhorn, Lyndon Dean, and Jim Crisman.

Bud Sorgenfrei says he and his family are beginning to feel like real natives, eating crawfish, crabs, oysters, etc. Living in New Orleans and working for Texaco, of course.

Harry Kugler and wife Jean Anne live in Calgary, Alberta. Harry works for Britalta Petroleums Limited. His son is nine years old and daughter five.

Diz Dean became a father again on December 20, 1960, when Benton Harold was born. He is now Staff Engineer with Standard and lives in Bakersfield.

Larry and Buddy Rooney report the birth of Jean Timothy on May 2, 1960. They live in Mattoon and Larry works for the Humble Company.



Denny Lucas, of the California Company, has been transferred to the Production Department to do reservoir engineering and well-site geology on off-shore and marsh wells. If you come to New Orleans, look him up.

Bob Barbour is employed by the Ohio Oil Company doing subsurface work, especially in the Albio-Scipio trend. He sees Mike Cowan occasionally, and says Mike is doing all right for himself. Bob lives in Jackson and has two girls and a boy.

Frank Kottowski writes there is nothing much new in the Land of Enchantment. As he was one of my students, he blames his fate onto me. Wish I had had more "Franks". His chief gripe is that he is not hefty enough to bowl 300.

Frank Pruett gets back often, as he lived in Bloomington as a "boy". He assures me that there are no lost Indiana alums in Midland; and that Paul Raymond, Bill Crites, and Jim Mahoney are the only other grads in the area.

Bill Crites has recently come to Midland for the Gulf Oil and Refining. Bill married Jo Anne Jenne in 1957 at Wichita Falls. Their daughter, Kathleen, was born in Abilene.

Bert Hale was promoted to Research Geophysicist of the California Company in April last year and is enjoying the work very much. He sends regards to all his friends.

Al Miesch sends greetings to the faculty and alumni from Denver where he is working with the Radioactive Materials Branch of the U.S.G.S.

Dick Erd wants to know if receding hairline, advancing waistline, etc., features of anthro-geomorphology, are considered vital statistics. They are certainly vital to the owner thereof, I would think. Brian Mason visited him on his way to New Zealand for Xmas, at Menlo Park.

Dick Kirk works for the Tennessee Gas Transmission Company at Lafayette, La.

Wes Pierce writes from Tuscon that we continue to work and play in the rapidly developing Southwest. Dean Clark lives in Gallup, not too far away.

We have been grateful for Teruo Yamamoto's cards at Xmas. He works for the U. S. Forest Service and lives in Honolulu. His work is watershed management research and he wants to know of any other alumni working in the same field.

#### DEATHS

Mrs. Julia A. Foster of Grand Valley, Colorado, writes that her husband, Thomas Darrell Foster passed away on December 8, 1960. He was a teacher and administrator in the field of education. He was born February 20, 1892. Mr. Foster received the A. B. degree in Geology in 1915.

Byron T. Sheldon, who received the M.A.T. degree in 1956, died on March 14, 1961. Byron was working as salesman for an insulating company and resided in Loudonville, N. Y., a suburb of Albany.