GVSC GEONEWSLETTER

Volume 1
Fall, 1975

Dear Alumni, Students, and Friends of the Department:

For several years now the geofaculty has felt that the time is appropriate to initiate an annual departmental newsletter. Our graduates are growing in number, geographic distribution, and accomplishments. The department continues its modest growth in students and faculty, facilities, and achievements. We are old enough and far enough evolved to have a history, and a desire to keep our strong ties to the past as we look ahead. So it is that we present our first attempt at a newsletter after several false starts. Some of you will recall receiving a questionnaire two or three years ago as evidence of this long held intention. We've included a similar questionnaire at the end of this newsletter in the hope that you will enjoy hearing some news, and help us prepare something more up-to-date for next year. To kill the proverbial two birds, I've simply used last spring's annual departmental report to the Dean as the core for this newsletter and added some personal news notes.

I have been struck by the sense of community among our students, faculty, and alumni since the day I arrived at GVSC. It's a pleasure for all of us when our graduates and former student friends of the department write or come through to visit. Unfortunately, we have not fostered such ties with everyone as much as we would like. I hope this is a beginning to strengthen old kinships and reestablish lapsed communications.

Best regards,

Bill Neal

William J. Neal

FACULTY/STAFF NEWS

John Henderson
Associate Professor
of Geology

A.B., Franklin and Marshall College
M.Sc., Northwestern University
Ph.D., McMaster University

Jack came to Grand Valley in 1970 from mineral exploration. He spent the summers of 1973 and 1974 mapping in high rank metamorphics in northern Canada. Since last March he has been on a leave-of-absence to work for the Canadian Geological Survey in Ottawa. Jack's wife Timea and their children joined him in Ottawa for the summer. He is currently completing final map copy and writing up the results of his previous summers' field work and petrologic studies since going to Ottawa. We look forward to Jack's return in January, and expect some good fish stories.

Dick Lefebvre
Professor of Geology

B.S., University of Michigan
M.S., University of Kansas
Ph.D., Northwestern University

Dick and his wife Sandy and their children just returned from an 8 month sabbatical leave during which time he worked for the U.S.G.S. EROS (now LANDSAT) Program. During the summer of 1974 he attended the EROS training program in Sioux Falls, South Dakota. His main research project while in Reston, Virginia was to use remote sensing imagery to map the Craters of the Moon, Idaho region. Last May he did ground truth mapping in Idaho and went on to the Jet Propulsion Lab in California to do computer digital processing of the Idaho imagery. We anticipate learning much from Dick when he presents his results to the annual Remote Sensing Symposium in Ann Arbor, and in his new Winter Term course on Remote Sensing. Who says you can't teach an old mineralogist new tricks?

John Lucke
Professor Emeritus
The Anchorage E-24
15 Pleasant Street
Harwich Port, Mass.
02646

B.S., M.A., Ph.D., Princeton University

Johnny is GVSC's first Professor Emeritus, retiring in 1973. As founder of our department, a gentleman, and an outstanding geologist, he has our highest esteem. Grand Valley and the community also owe much to Johnny's wife, Virginia, and it was with great sorrow that we learned of her death in 1974. After going on an around the world cruise this past winter (!), Johnny returned to his residence in beautiful Cape Cod. The Hendersons and Lefebvres enjoyed a reunion with him there this past August.

Bill Neal
Associate Professor
of Geology

B.A., University of Notre Dame
M.A., Ph.D., University of Missouri at Columbia

Bill and Mary and their three daughters came to GVSC in 1971 from Statesboro, Georgia where Bill taught at Georgia Southern College. During the summer of 1974 Bill wrote geology modules for College IV, Grand Valley's newest undergraduate college. Bill's wife, Mary, was administrative assistant to the Dean of College IV until moving to GVSC's Office of Program Development this summer. This past summer Bill assumed the chairmanship of the department and kept the ship afloat in the absence of some of our more experienced hands. He has recently begun a research project involving a look at the heavy minerals of the Hatteras Abyssal Plain sediments. He is also responsible for the Triple Threat (courses in Stratigraphy, Sedimentation, and Paleontology).

Norm Ten Brink
Assistant Professor
of Geology

B.S., University of Michigan
M.S., Franklin and Marshall College
Ph.D., University of Washington

Norm and his wife Shirley came to GVSC in 1973 from Columbus, Ohio where Norm was Assistant to the Director and Research Associate in the Ohio State Polar Studies Institute. Norm filled the position of Geomorphologist left by Dr. Lucke's retirement. He is active in Pleistocene/Glacial Geology research in Greenland and Antarctica, and added Labrador to the list during the summer of 1974. The geology family grew a year ago with the arrival of the newest Ten Brink, Andrew. Two big disappointments have occurred for Norm this past month. First the logistics for a Winter Term visit to Antarctica failed to materialize postponing field work for another year, and secondly, he lost at the lottery for a hunting permit to try for some big game in Colorado this fall.

Ed Tremba
Visiting Assistant
Professor of Geology

B.S., University of Michigan
M.S., Ph.D., Ohio State University

Ed represents the department's utility infielder, replacing the combination of Dick, Jack, and tentatively Norm. Ed and Jane came to Grand Valley from Albuquerque, New Mexico where Ed was a civilian employee with the Air Force Weapons Lab. studying the carbonates in Eniwetok Atoll. Ed continued this work during the summer in New Mexico, and is scheduled to present a talk on ancient evaporites at the October meeting of the Eastern A.A.P.G. sectional meeting. He's also laid some geochemistry on the majors which is good medicine!

Jeff Sutherland
Part-time

A.B., Cornell University
Ph.D., Syracuse University

Jeff is Director of Geological and Hydrological Studies at Williams and Works. He was formerly on the geology faculty at Slippery Rock State College. This past spring, the department utilized his expertise and he again became a prof-type two nights a week and Saturday morning to teach a course in applications of engineering geology to geohydrology. Thanks Jeff, and let's hope we can do it regularly.

Bette Weerstra
Secretary

Bette is the glue that holds the Geo Department together (and we suspect the same for the Physics Department -- her other "half-time" effort). With more time on the "rock" at GVSC than half the faculty, we depend on Bette to be in the know, and she is. We will also blame her for all typos, spelling and grammatical errors, and false information that appear in these pages.

Barb Scribner
Storekeeper,
half-time

Barb has been with the department since last January, on a half-time basis with Chemistry. She has become an aggressive photographer of graphs, charts, and maps; and is constantly moving boxes, rotaps, and such about. In spite of both faculty and students, she's stuck it out 9 months to date.

OTHER CAMPUS GEOLOGISTS

John MacTavish
WJC

B.S., M.A., Bowling Green State University
Ph.D., Case Western Reserve University

John moved to WJC when it was formed at Grand Valley in late 1971. Although the course structure in that college is not in the traditional style of CAS, John has offered environmentally-oriented geology courses as well as the more esoteric organic gardening and how to be compatible with your auto engine. John took a sabbatical leave this past year, and was planning to begin construction on a new home this past summer.

John Warren
TJC

B.A., Cornell University
Ph.D., Stanford University

Another John/Paleontologist, but in the "experimental" college, TJC. John came to GVSC after teaching at the University of Cincinnati. He has developed several geology field oriented courses including work in petrology, paleontology, and the Geology of Michigan. John and his students are doing research on Devonian microfossils, brachipods, and other questionable beasts. A good interchange of geology-oriented students between TJC and CAS has resulted from John's efforts.

CAS GEOLOGY DEPARTMENT
1974-75 Academic Year-end Report

The 1974-75 academic year was one of marked progress for the Geology Department. The year will be a milestone in the history of the department for it saw significant curriculum revision, faculty and student achievements of the highest caliber, a major instructional/research equipment acquisition, and alumni advancements that begin to reflect the efforts of the department over the time since its inception. Growth continued toward developing undergraduate programs in geology and earth science with high quality instruction soundly based on modern geology, faculty and student research, development of graduates with high promise for future professional contribution, and in-community service by faculty and students.

The quality and quantity of measureable results of this small science department over the past year, as outlined in the following pages, explain the pride and sense of achievement felt by members of the departmental community. Likewise, the progress and achievements of the department's alumni is cause for a sense of achievement and satisfaction with past efforts on the part of the longer term or past faculty.

The year was not without problems, frustrations, and challenges that remain to be met and solved. Some of these problems are summarized at the end of the report.

HIGHLIGHTS

I. Teaching/Curriculum Devleopment

A. Increased Faculty Breadth and Depth

1. Addition of Dr. Edward Tremba, Geochemist as Visiting Assistant Professor (Ed received excellent student evaluations Winter Term, has contributed to curriculum expansion, been significant in helping place students, and stimulated everyone with his geochemical perspective of geology).
2. Addition of Dr. Jeff Sutherland, Geohydrologist to teach a Spring Term course in Engineering Geology relative to groundwater (Jeff, a geologist for Williams & Works Engineering of Grand Rapids, is providing a rigorous course in applied geology that several outside students are taking for graduate credit).
3. The regular core faculty of Henderson, Lefebvre, Neal, and Ten Brink continue to upgrade course content, challenge the student's intellect, and are well received by majors and non-majors alike.
4. Field experience is being included in courses with increasing frequency.

B. Increased Course Offerings

1. Following the recommendations of Dr. John Moss, Franklin and Marshall University, after his 1974-75 consulting visit, the geology faculty proposed and received approval for the following new courses:
   Geology 150, Introductory Field Course, (Lefebvre and Neal)
   Geology 310, Sedimentology (Neal)
   Geology 420, Glaciology (Ten Brink)
   Geology 440, Geohydrology (Ten Brink)
   Geology 470, Geology Internship (Lefebvre and Neal; initiated Summer, 1974)

2. Offerings on a one term special topic basis (Geology 480) of the following:
   Glacial Geology (Ten Brink, Fall '74)
   Geochemistry (Tremba, Winter '75)
   Engineering Geology Applied to Groundwater Problems (Sutherland, Spring '75)
   Isotope Geology (Tremba, Fall '75)
3. Utilization of Geology 460 Seminar to gain a basic introduction to x-ray diffraction (Prof. Tremba, coordinator).

C. Revised Curriculum
1. With an expanded selection of geology courses, it was agreed among the faculty and departmental student representative that a more structured outline of courses be designated for geology majors. This provides a basic core of geology courses to assure maintaining a basic education in the disciplines of geology.
2. The new curriculum will take effect in the Fall 1975.
3. The more structured Earth Science curriculum remains essentially unchanged.

D. Addition of Geology Minor
1. The Geology Minor is a non-certifiable minor designed to supplement other science majors such as in Environmental Science. It will also serve as a general science interest minor.
2. The Earth Science Minor remains essentially unchanged.

E. Revised Numbering of Geology Courses
1. A complete renumbering of existing courses was carried out to meet CAS numbering restrictions, designate level of course, indicate courses which fall in sequence, or designate alternates.
2. New numbers will go into effect Fall 1975, but old numbers will continue to appear for two years to avoid confusion.

F. Relationships to Other GVSC Colleges
1. The Geology Department has developed modules in geology for College IV credit.
2. A small number of geology majors cross register in TJC for John Warren's courses in paleontology. TJC students occassionally take CAS geology courses.

II. Placement of Students

An increased effort was made in this year of recession to place students in geologic employment, particularly with respect to summer jobs. The effort has met with limited success, and will provide a foundation on which to build in future years. Results are incomplete but noted below as of the end of May 1975.

A. Graduate School

Graduate education is still a necessity for most levels of geologic employment. Somewhat inexplicably our majors due to graduate in Spring 1975 were slow in applying to graduate school. Many feel a need to work and accumulate savings prior to attending graduate school. This is unfortunate as several good students have postponed continuing their education.

Of nine graduating seniors:
1. three applied to graduate school
   a. Three were accepted;
   b. two were awarded teaching assistantships,
   c. schools included Oklahoma State University, University of Southern Illinois, and Western Michigan University.

2. two are currently in process of applying to graduate schools
3. two "may" yet apply,
4. four to five would prefer to gain immediate employment and are actively seeking such.

B. Permanent Employment

Of four graduates seeking permanent employment as geologists:

1. one has obtained employment,
2. two have obtained temporary geologic employment (summer),
3. one senior (non-graduating) has been offered a permanent position .

C. Summer Employment

Of 15 majors (including several graduating seniors) seeking summer employment in geology:

1. eight either have positions or a strong likelyhood of a position compared to five during Summer '74.
2. In addition, two majors will be employed by the department.
3. Potential summer jobs include:
   a. field mapping in Canada
   b. carbonate studies for the U.S. Air Force
   c. assistant to consulting geologist (petroleum)
   d. soils laboratory
   e. geophysics crew
   f. engineering firm
   g. geology of archeology site
   h. D.N.R.
4. Of those obtaining summer positions, four are graduating seniors including two who are definitely going on to graduate school in the fall.

III. Student Activities

The geology/earth science majors enjoy a close sense of community within the Geology Department. They have been most active this year both as a group and individually.

A. Scholarships/Honors

1. National Association of Geology Teachers Scholarship to attend Geology Summer Field Camp:
   Miss Wendy Bierlein received this national award for 1975. This scholarship is in its second year and a GVSC student has been a recipient both years (Miss Patty Videtich, 1974).
2. Jeff Spruit was named the senior honors student for the Geology Department.

B. Field Camp Attendance

1. Eleven students attended six different field camps during '74.
2. Two students will be attending camps during Summer 1975. (Wendy Bierlein-Idaho State University, Chris Byle-Indiana University)

C. Geology Club Activities

1. Field Trips: The Geology Club sponsored field trips in conjunction with the Institute of Lake Superior Geology meeting in Marquette, MI and the Geological Association of Canada meeting in Waterloo, Ontario. The Club applied for and received student activities monies in support of these trips. On their return, they gave public seminar reports on the trips.

2. Departmental Collections Exhibit, Woodland Mall: The Club sponsored and supervised the preparation and exhibit of geologic materials in the Woodland Mall Collectors Show, Feb. 28-Mar. 1, 1975.
3. The Club held regular meetings and social functions including its annual spring picnic.

D. Independent Student Activities
1. John Vrona and Greg Smith taught a rocks and minerals course for the Grand Rapids Mineral Society Jr. Rockhounds through the Grand Rapids Museum.
2. Students Bob Schulz and Jeff Martin visited classes in high/junior high schools to give presentations. Bob also participated in a Kenowa Hills High School field trip using the Angus.
3. Several students organized a Fall field trip to Essex, Illinois and collected Pennsylvanian plant fossils.

E. Student Departmental Assistants
A large number of majors continue to ably assist in the department. They account for much of the department's routine progress. Thanks students!

IV. Faculty Activities
The geology faculty continue to be involved in a wide variety of activities. Quality teaching and departmental development continue to be the collective objective of the faculty (see Parts I and V). Individually, each faculty member also pursues professional development and serves the community, both on and off campus.

A. Research
Each faculty is involved in individual and student directed research to varying degrees as follows:
1. John Henderson: Currently on leave-of-absence with the Geological Survey of Canada, Ottawa, Ontario concluding laboratory study of high-rank metamorphic rocks of northern Canada. Professor Henderson will present his conclusions of this work and the two previous summer of field mapping in an extensive report to be published by the Canadian Geological Survey. In addition, Professor Henderson coordinates student field mapping projects in Western Michigan.
2. Richard Lefebvre: Currently on sabbatical leave with the U.S. Geological Survey, Reston, Virginia learning remote sensing techniques of the EROS/LANSAT systems and applying such to mapping individual lava flows in the Crators of the Moon, Idaho region. Tentatively, Professor Lefebvre is also concerned with developing a student-instruction manual for teaching applications of remote sensing.
3. William Neal: Professor Neal is currently initiating a heavy mineral petrologic study of deep-sea sands from the Hatteras Abyssal Plain, Western North Atlantic in cooperation with a research team working through Duke University, Durham, N.C. In addition, Professor Neal is directing student research in a sedimentologic study of primary sedimentary structures in glacial outwash deposits in Western Michigan.
4. Norman Ten Brink: Professor Ten Brink is actively involved in several climatic/glaciology studies including his N.S.F. supported work in Antarctica (field work scheduled for Winter, '76), Baffin Island, and a possible extension of his Greenland research to other parts of that country.

In addition, Professor Ten Brink supervises students in landform mapping/glacial history interpretation of the West Michigan area. Professor Ten Brink maintains research ties with the Ohio State University Institute of Polar Studies, A.E.C. Columbia University project, University of Colorado Canadian Arctic Studies, and agencies working in Greenland.

5. Edward Tremba: Professor Tremba continues his work with carbonate petrology/diagenesis of Pacific coral reefs particularly Eniwetok from a geochemical point of view. This work extends into ancient carbonate and evaporite deposits. He also supervises student research in the areas of clay mineralogy of glacial tills and dissolved solids in groundwater.
6. Jeffrey Sutherland: Dr. Sutherland is supervising one student research project dealing with the geochemistry of groundwater (Spring Term overload position).

B. Publications:

1. Henderson, J.R., and others, 1975, Geology of the Penrhyn Group Metamorphic Complex, Melville Peninsula, District of Franklin: Geological Survey of Canada, Paper 75-1, Part A, p. 349-351.
2. Ten Brink, N. W., and others
   a. 1974, Greenland Ice Sheet History since the Last Glaciation: Quaternary Research, v. 4, no. 4, p. 429-440.
   b. 1974, Glaciology and Glacial Chronology in the South Shetland Islands: Antarctic Jour. U.S., v. 9, no. 4, p.168-171.
   c. 1974, Glacio-Isostacy: New Data from West Greenland and Geophysical Implications: Geol. Soc. America Bulletin, v. 85, no. 4, p. 219-228.
   d. 1974, Quaternary Map of Greenland (1:500,000): The Geological Survey of Greenland
   e. Professor Ten Brink's research activities were written up in the AMQUA Newsletter, The American Quaternary Association, v. 5, no. 2
   f. Professor Ten Brink gave three unpublished reports; 1) University of Colorado, Symposium on Baffin Island, 2) glacial symposium, the University of Wisconsin-Milwaukee, 3) glacial seminar, University of Minnesota.
3. Tremba, E. L., and others, 1974, Quaternary Diagenetic History of Eniwetok Atoll: Geol. Soc. America, Annual Meeting, Miami, Florida

C. Grants, Stipends, Joint Appointments, Etc. Outside of CAS

1. John Henderson, under contract to the Canadian Geological Survey.
2. Richard Lefebvre, under contract to the U. S. Geological Survey, sabbatical leave from CAS, summer 1975 CAS research support.
3. William Neal, College IV 1974 Summer Workshop and adjunct faculty, Duke University research participant.
4. Norman Ten Brink, 1975-76 N.S.F. grant for Antarctic Research, GVSC faculty research grant 74-75, A.E.C. research participant, University of Colorado research participant.
5. Edward Tremba, U.S. Air Force research participant/summer employee, seed grant for neutron activation analysis of geologic materials (University of Michigan).

D. Meetings Attended

John Henderson: Geological Society of America, Miami, Florida
Geological Association of Canada, Waterloo,Ont.
Ground Water Conference, Lansing, MI

Richard Lefebvre: EROS Training Session, Sioux Falls, S.D.
American Geophysical Union, Washington, D.C.

William Neal: Great Lakes Section, Society Economic Paleontologists & Mineralogists, Chicago, Ill.
American Association of Petroleum Geologists, Dallas, TX

Norman Ten Brink: Symposium on Baffin Island Glacial Geology, Boulder, Colo.
Symposium on Glacial Research, Milwaukee, Wis.
Geological Association of Canada, Waterloo,Can.

Edward Tremba: Symposium on Pacific Reefs, Albuquerque, N.M.
Neutron Activation Workshop, Ann Arbor, MI
Ground Water Conference, Lansing, MI

E. Field Trips

See part V-A.

F. Community Activities (Lectures, School Visits, etc.)

1. University Seminars/Symposia - 4
2. High School Presentations - 2
3. Junior High School Presentations - 3
4. Rock and Mineral Club Presentations - 4
5. Other Public Lectures - 1
6. Advisory Roll in Environmental Issues - 2
7. School Group Visits to Department - 3
8. Visits to Student Teachers - 4

G. Other Activities

1. Professor Henderson was named a fellow in the Geological Association of Canada.
2. Professor Neal prepared the following copyrighted College IV modules:

*Module 44-20-01 Physical Geology: Introduction to Earth Science (July, 1974)
* 44-20-02 Physical Geology: Earth Materials--Minerals (Sept., 1974)
* 44-20-03 Physical Geology: Earth Materials--Rock Cycle (Oct., 1974)
* 44-20-04 Physical Geology: Maps I--Topographic (Dec., 1974)
* 44-20-05 Physical Geology: Maps II-Geologic Maps and Rock Structure (Dec., 1974)
* 44-20-12 Physical Geology: Geology Field Experience I (Dec., 1974)

*Coauthored by geology major, Douglas Hull.
Thanks faculty.

GEOLOGY FACULTY ACTIVITIES
SUMMARY SHEET

Papers Read	3
Publications	6
Grants (off-campus)	2
Meetings Attended	11
"Local" Talks	10
Campus Committees, etc.	8
Field Trips Led	9
Courses Developed	4
Courses Deleted	1
College IV Modules Published	6

V. General Departmental Activities

A. Field Trips: Field work remains the essence of geology. The department kept an intense schedule of field trip attendance in the following three areas:

1. Faculty Attendance at Professional Field Conferences
   - Great Lakes Section Society of Economic Paleontologists and Mineralogists
   - Geological Association of Canada

2. Student Attendance at Professional Field Conferences
   - Institute on Lake Superior Geology
   - Geological Association of Canada

3. Course Related and/or Student Originated Field Trips
   - Essex, Illinois (student trip)
   - Michigan Upper Peninsula (departmental trip)
   - Angus Cruises (2) (Oceanography)
   - Western Michigan (Glaciology; Geochemistry; Eng. Geology)
   - Alpena, Michigan (departmental trip)
   - Sylvania, Ohio; Bellevue & Grand Ledge, Michigan (Historical/Stratigraphy)
   - Lansing, Michigan (Water Conference: Geochemistry, Adv. Physical)

B. Equipment Acquisition

The highlight of the year from a mechanical point of view was when the new x-ray diffraction unit went on-line. The following summary report was prepared by Professor Tremba:

After several months delay, the department enthusiastically welcomed the installation of the Philips x-ray diffractometer in 110 Loutit during October, 1974. Students from Mineralogy and Oceanography courses were the initial principal users of the machine. A larger cross-section of geology majors were introduced to and were users of the machine during the winter geology seminar (Geology 460). The formal seminar meetings dealt with student presentations on diffraction principles and applications of the various powder and single crystal techniques. In addition, each student was given an unknown powder sample to identify by means of x-ray diffraction analysis. During the course, Steve Grodecki successfully obtained the first diffraction patterns on film.

Currently the machine is being used by Craig Shoemaker to identify clay minerals as part of his senior research project (Geology 499). As a result of the Geology 460 seminar, several other students have expressed a desire to utilize the unit in partial fulfillment of their senior research projects.

Table 1 gives a percentile account of the various uses of the machine during its 126 hour machine life time. It is expected that machine usage will increase overall next year, especially in the areas of mineralogy and senior research projects. As can be seen in Figure 1, monthly usage of the machine fluctuated about an average of 18 hours per month from October, 1974 to April, 1975.

This piece of equipment provides a sophisticated analytical tool commonly found in quality undergraduate geology departments. The faculty and students see this as a big step in the right direction for strengthening the geology/earth science programs.

Thank you Harold!

C. Geology Library: The department accomplished four important developments in improving and continuing the growth of geology holdings on campus as follows:

1. Zumberge Library added six important geologic journals to the current periodicals list, however, at the same time there was pressure to trim the holdings and one journal was indicated as likely to be dropped. The relocation of geology related government publications (U.S. Geological Survey) to the third floor is a healthy trend to consolidate geology materials within the campus library.
2. The development of a Library of Science within Loutit Hall is regarded as very useful for our students. Unfortunately the space limits on this facility necessitate that much of the Lucke/Krumbein collection remain in geology storerooms or faculty offices.
3. The geology faculty has placed current copies of more than a dozen of their scientific journals in room 122 Loutit for use by students. Hopefully, this will encourage familiarity with the literature by having materials conveniently at hand. In addition, the department allocates a small percentage of its budget to subscribe to periodicals of a professional nature (job advertisements, etc.) not in the library, and soft bound reference materials useful to the students but not typically ordered by Zumberge Library.
4. The department continued to expand and improve in the area of map holdings, however, considerable growth is still needed in this area.

D. Alumni News: A large number of geology/earth science alumni keep in touch with the department voluntarily. They commonly express a strong interest in current departmental activity and in turn show pride in their own progress. Some of the more significant items of interest are included here:

1. Jim Walters, GVSC-CAS 1970 geology graduate with honros, has received the Ph.D. degree in geology from Rutgers University (June 1975). Jim is the department's first graduate to complete his doctorate, and did so with the support of an NDEA Fellowship and Sigma XI grant.
2. Joe Tondu has received a Masters Degree from the University of Texas and will go to work for Getty Oil.
3. John Dombrowski has completed a Masters Degree at Washington State University and will go to work for Texaco.
4. Dave Johnson and Mike Kaminski (1974 graduates) M.S. candidates at Western Washington University, are employed as geologists in Alaska for the summer.
5. Several other alumni have visited the department over the past year.

Thanks alums!

E. Student Aid

1. The geology faculty established a fund for a geology/earth science schplarship.
2. The department continued to employ undergraduate majors as departmental assistants.

F. Recruitment

The department made significant progress in planning future recruitment procedures.

1. The revised departmental brochure was printed.
2. Meetings were held with the following offices: Admissions, Counseling, CAS Advising, CAS Dean's Office, and Placement

FIGURE 1: MONTHLY X-RAY USAGE 1974-75

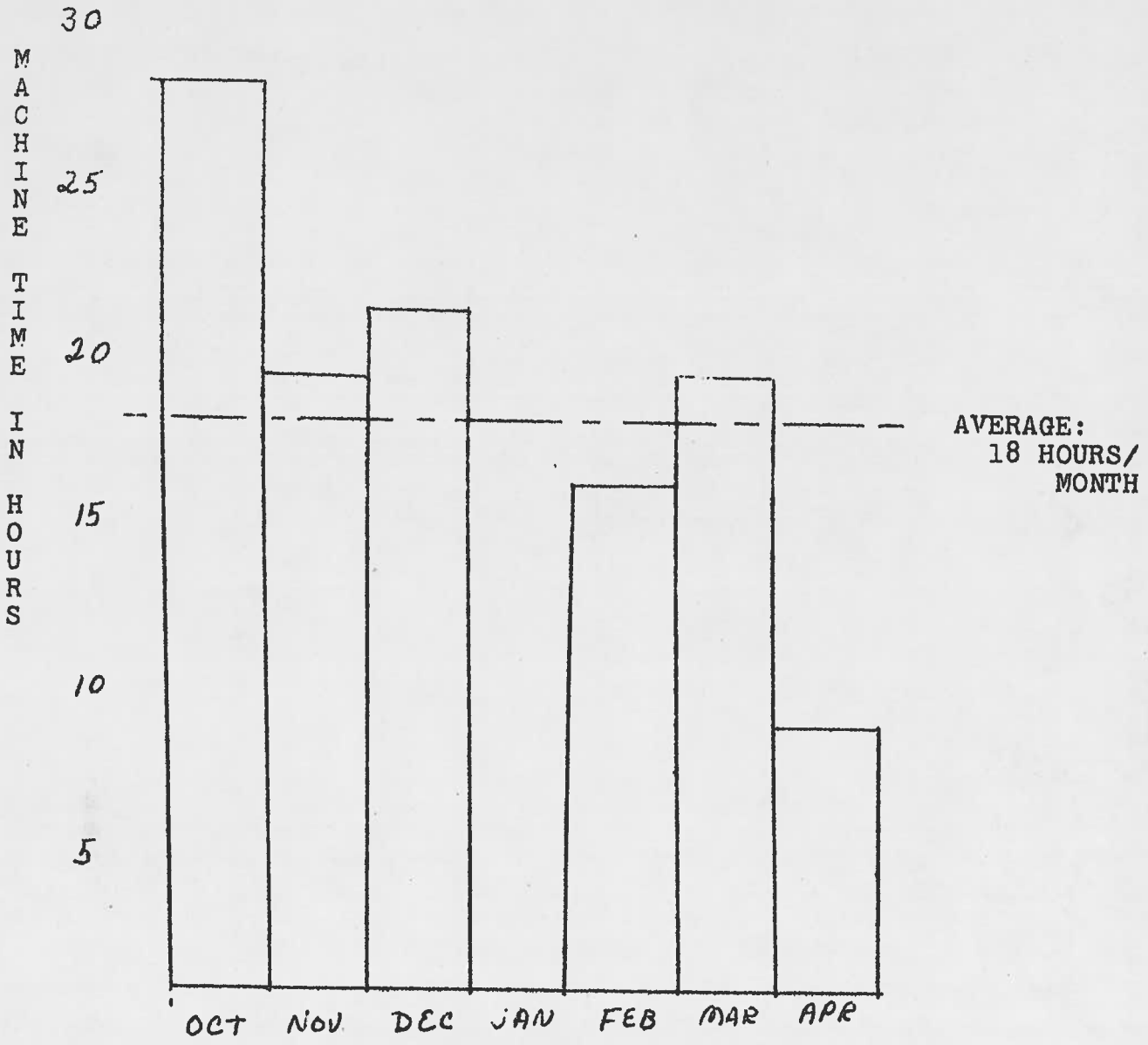

TABLE 1

Geology 460 (Seminar)	26.05 hours	20.6%
Geology 499 (Senior Research)	14.5 hours	11.5%
Supervised	8.55 hours	6.8%
Miscellaneous	28.95 hours	22.9%
Unknowns	43.95 hours	34.8%
Geology 430 (Oceanography)	4.45 hours	3.5%
	126.45 hours	
	or 18 hrs/month	

Miscellaneous = practice, camera work, Physics lab, Mineralogy, machine alignment check, crystal structure analysis

G. Departmental Data
1. Fiscal year 1974-75 FTE student/faculty ratio for 4.32 faculty was 20.9/1.
2. The number of majors ranged between 34 and 48 for various times of the academic year.
3. The department should begin the Fall 1975 term with approximately 35 majors.

VI. Problems

It seems appropriate to outline some of the negative aspects for the past year. In some cases solutions can be sought in the coming year, other problems are beyond departmental control or influence.

A. Space/Security
1. The department continues to labor under confined space and increased crowding. The partial remodeling of room 110 to accommodate the x-ray unit did not alleviate the space problem, however, the addition of cabinets during the coming year will provide secure storage for petrographic microscopes.
2. The past year was the first in which the department suffered severe losses due to theft including both equipment and specimens. In the case of the latter, the loss resulted from the policy of open collections.
3. The middle storeroom has been turned into a secured checkout room. This was necessary to secure expensive equipment items. It has also created some inconvenience for faculty and students.

B. Scheduling of Space

Conflicts between departmental scheduling and WJC geology course sections scheduled into room 118 Loutit arose during the year. Hopefully, the CAS Dean's office has solved this problem for the future. It does illustrate the problems generated by the severe limits on science space at GVSC.

C. Campus Services

The geology faculty expressed its deep concern to the GVSC administration in regard to the pressures of enrollment growth on campus services. Deterioration of facilities, over-extended AV services, and other problems were pointed out as examples. Greater state funding of these areas is needed.

D. Demand on Faculty Time

The previous pages should reflect the intense effort being expended by the geology faculty. To say they are "stretched thin" is an understatement, both with regard to teaching efforts (e.g., Spring '75 FTE ratio of 22.9 for a small science department) and outside activities (numerous campus committees, etc., necessary research, off campus talks, recruitment, etc.). In the years to come it will be necessary to evaluate all activities and some sacrifices will be made to maintain overall quality.

E. Budget

The inflationary spiral has been felt very strongly in the department's budget. At best an attempt will be made to maintain the current level of operational budget, student wages, and equipment acquisition. Grant proposals offer a limited avenue for attempts to acquire major equipment items.

VII Future Plans

A. The department's commitment is to excellence in its existing programs. Now that the consultant's recommendations have been met, there will be a period to test the new core plan for the two majors as well as the two minor programs. In the future "tracts" within the core may be considered.

B. Eventually growth should reach a level to support a faculty of six including the areas of geochemistry and geophysics. In part, this may be achieved by developing a permanent inclusion of the applied ground water course and use of part-time faculty.

C. The department's ongoing research project of mapping glacial sediments and landforms in Western Michigan will be expanded and incorporated into existing courses. The results will provide a basis for more detailed investigations of mineral composition, especially x-ray analysis of clays, and sedimentary processes.

D. The faculty will continue to build and widen the base of their individual research experience through leaves-of-absence, sabbaticals, and establishing relations with other institutions involved in geologic research.

E. Finally, the department will maintain a close alliance with its increasing number of alumni as potential contacts to extend opportunities to future majors in geology and earth science.

STUDENT NEWS

The Geology Department will begin the 1975-76 school year with just over 40 majors, mainly in geology, a few in earth science, and one or two group science majors with geology emphasis. At this time, we have no means of determining the number of earth science and geology minors, but a significant number of students will be opting for these minor areas. We are encouraged by the serious environmental science students who minor in geology, and this year we are extra proud of one such person. Mr. Ric Aguilar was named a recipient of an American Geological Institute's Minority Scholarship. Two of our geology majors have received similar national recognition. Wendy Bierlein received the N.A.G.T. Summer Field Camp Fellowship to attend Idaho State's camp in Montana this past summer. Patty Videtich was awarded the same scholarship the previous summer to attend the Y.B.R.A. camp. Such recognition and the increasing success of our graduates in entering graduate school, obtaining assistantships, and finding jobs speaks well for the entire department.

Two other trends are worth noting. First, many of our majors are finding summer jobs in geology. Second, more of our majors are women (would you believe they've captured the Geology Club?) including recent additions Mary Borchert, Bridget DeVos, Sheryl Hoving (summer departmental assistant), and Julie Rutherford (we thought you'd never declare Julie!). Julie Hewlett has been around a little longer, but it was only this past year that she decided on a double major in Anthropology/Geology. Julie spent the summer on an anthro. dig in Tennessee. Fran Sims is a possible transfer from TJC. She is one of several TJC women who have a strong geology interest fostered by John Warren. Fran, Delores Cates, and Joanne Sillman are at home in the department.

Our summer part-time geologists included Doug Sartoris working for Johns Manville Mining out of Nye, Montana. Doug will continue his exploration work through December. Loyal Suntken and Guy Waggoner spent the late summer in New Mexico where they are evaluating paleontological sites along a proposed railroad route. Loyal (another double major with Anthropology) may remain at the job through Fall Term. Guy was scheduled to go to Antarctica with Professor Ten Brink in the winter, but this work has been delayed. Patty Videtich was also in New Mexico working for the U. S. Air Force in a project related to Ed Tremba's Eniwetok carbonate research. Other western U. S. visitors included Chris Byle attending Indiana University's camp in Montana, Wendy Bierlein at Idaho State's Montana camp, Jim Schulz traveling in Colorado, and Scott Smith roaming freely in the same area. Doug Hull was field assistant to Dick Page, mapping in Precambrian volcanics and metasediments of the Sioux Lookout area in Ontario. Lynn Bravender and Fran Sims worked for the Michigan DNR this past summer.

Several people were busy taking summer work on campus including Julie Rutherford, R. C. Smith, Larry Fultz, Greg Smith (almost fully recovered from last year's hunting accident), Sheryl Hoving, and Doug Morrison(?). Tom Bee kept our x-ray machine warmed up, and Craig Shoemaker, resident clay mineralogist, occasionally putzed around while regaining his strength from a bout with mono. We are a sickly lot and we try to keep the bad leg tradition of Eric Christrup going. Greg Smith was our crutch-man this past year, and Jim Schulz's knee surgery in August torpedoed his plans to go on an oceanographic cruise over the Hatteras Abyssal Plain. Dana Wregglesworth proved to be a worthy backup man and spent a week on Duke University's R.V. EASTWARD. He returned with 50 samples that he and Jim will process for Bill Neal's research.

How the remainder of the gang spent their summer wasn't known at press time. Rumor has it that it was wedding bells for Tim Baker in September. The same thing happened to Chris Byle. It must be catching. We saw Dave Zeider helping the old veterans to enjoy the 4th of July in Allendale. Hall, Hazard, Hister, Kimball, Plomp, Kratt, Waythomas, McClow (the latest addition to our stable of frogmen), Elias, Morey, Kieda, Kovacevich, Anderson, DeVree, Tomkins, and Vrona remained anonymous over the summer, but we'll see future achievements from these students.

Our Mississippi gambler, Rod McGrain, was married in Texas over the summer. Rod's also selling floating docks (if you need one). Del Dornbos and Jim Dexter are rumored to be returning in the fall. You "old timers" will recall that Uncle Sam captured Jim several years ago and the field trips never were the same afterward.

Our geocommunity includes more than just those majors named above. As in past years, we see our minors and student friends associating (identifying?) with the department. People like Eric Trasky (PE major/ earth science minor), Mark Jordan (TJC geology interest), Steve Reder (paleo. interest), Leslie Wurn (GRJC chemistry instructor), and others from CAS, especially Environmental Sciences, such as Molly Clawson, Paul Kampa, Steve Klop, et al. add zest to our courses and field trips. These, along with College IV students such as John Tyler and Doug Taylor, may ultimately become CAS geology/earth science majors.

ALUMNI NEWS

Antonides, Roger Geology (1972)
Roger is still very close to GVSC (Why don't we ever see you Rog?) as he and his spouse are building a home over on 46th St.. Roger works in the lab and on surveying teams for Prein and Newhof, an engineering firm out of Grand Rapids.

Arnold, Mark Geology (1975) Mark graduated this past spring and was aggressively utilizing GVSC's Placement Office to seek employment during the summer.

Atwell, Bill Geology (1974) Bill visited the department this past year after having worked in a road-materials testing laboratory summer 1974, and then traveling extensively. He did Europe and the west coast, and, to demonstrate what a small world it is, ran into Dave Johnson and Mike Kaminski in a state park in northern California last spring.

Austin, Larry Geology (1974) Larry took additional course work this past spring (Jeff Sutherland's course) and spent the summer working for Williams and Works Engineering, Grand Rapids.

Bee, Tom Geology (1974) As long as there are minerals to catalog, there will be a Tom Bee. He likes GVSC so well that he's stayed on to take additional work beyond the B.S. including work toward teacher certification.

Bishop, Mark Earth Science (1974) Rod McGrain reports that Mark has left on a two year contract to teach elementary school in Venezuela. That's a long way from the Grand Rapids golf courses, but we know how much Mark enjoyed his previous 10 weeks of practice teaching in South America. Take care on those mountain roads!

Booker, William Geology (1970) Whereabouts completely unknown!

Bowden, Doug Geology (1974) Department of Geology, Michigan Technological University, Houghton, MI 49931
Doug is currently in his second year of a geology Masters program at Michigan Tech. The majors who attended the 1975 Lake Superior Institute had a good visit with Doug, and we hope they heed his advise and helpful hints on graduate work. We always suspected Doug was a "hard rock"!

Bowles, Bud Earth Science (1972) Bud enjoys teaching earth science at Kentwood. He was last seen by Dick Lefebvre when he gave a talk in Bud's class last year. All the students were suitably in awe to this man who holds the questionable distinction of being the department's oldest grad.

Brintnall, Art Geology (1970)
After leaving Grand Valley, Art did some graduate work at WMU. Our last information indicates he was working for Prein and Newhof Engineering of Grand Rapids, and married Caryl Lynn Rossengrin on May 26, 1973.

Broughton, Jill Geology (1975) Jill is working for Bechtel Engineering in California, temporarily. Doug Sartoris reports that Jill has been trapped in the office but is hoping for field work. Strange that one has to go all the way to California to work on projects in Illinois.

Brown, Leo Geology (1972)
Our last communication with Leo indicated he was in graduate school at MSU (Master's in Geology) and also working for Lansing Heat Treating.

Christrup, Eric Earth Science (1974) Eric took a bad fall in 74, but after he recovered and learned to walk again, he went on to graduate. He currently is teaching science in the Coopersville school system. At last report the Christrups' were seen sporting about in a new Pacer. Johnny Lucke referred to Pacers (not necessarily Eric's) as "pregnant bubbles" this past summer on Cape Cod. Johnny's coining of apt but poignant names for things is well known. e.g., Loutit Hall as the USS Arizona, JHZ Library as Fort Zumberge, etc.

Corbett, Larry Earth Science (1973) Larry taught at Kentwood and the last we heard, was thinking about going on to graduate school to further his education.

Curtis, Lt. Tom Geology (1969)
79415 Indirect reports of a couple of years ago indicate that Tom is an Air Force Lt. in Texas. We need an update from Tom--- Where are you and are you still a lieutenant?

Dombrowski, John Geology (1973) Department of Geology, Washington State University, Pullman, Washington The last report was that John would soon be finishing his Master's degree at Washington State University, Pullman, and that he had accepted a job with Texaco in California. Are you out there John?

Fegel, Larry Earth Science/Minor Biology (1973) Blandford Nature Center Farm, 3145 Milo Ave., N.W., Grand Rapids, MI 49507
It grieves us deeply to report that Larry's wife Connie died in August. Connie was instrumental in developing programs for school children at the Blandford Nature Center. Both the Fegels had a strong commitment to environmental education for our young people. We sincerely hope Larry will continue this effort.

Feyen, Al Earth Science (1972)
Al is on the last year of his military tour with the Army. From visiting with Al this past year, it sounds like he has a nice cushy job and we taxpayers suffer so that the Feyens can enjoy Europe. Nevertheless, Al is looking forward to returning stateside and hopes to land a job teaching earth science.

Fink, Ray Group Science (1971) Last known to be teaching in the area.

Gebben, Dennis Geology (1969)
Our department's first graduate of a graduate school, MS Western Michigan, Dennis is a geologist for Williams and Works Engineering of Grand Rapids. We see Denny from time to time through the department, and we're on his donors list for some Coastal Plain soil samples.

Grodecki, Steve Geology (1975) Steve graduated this past spring and will enter WMU in the fall with an assistantship to pursue a Master's in geology. Steve has also been working for Williams and Works since last spring, as well as overseeing the Grand Valley Apartments. One of the Neal kids says Steve implied their old man is a smart alec. Is that true Steve?

Harshfield, James Geology (1972) Where are you?

Haskins, Roger Geology (1973) Roger did some graduate work at the University of Manitoba and then hired on with the Manitoba Dept. of Mines, Resources and Environmental Management. He's actively engaged in several projects relating to mineral exploration. Rog and Sue were through the department this summer but all the profs. were absent. Sorry we missed you. Are you still waiting for some heavy minerals?

Hunt, Herb Geology (1969) Herb was with the Frankfort Police Department, but now is on the Wyoming Police Force. He visited the department a year or so ago (to renew old acquaintances and not on business of course!)

Huyser, David Group Science (1968?) In 1968 Dave was teaching in the Grand Rapids school system.

Johnson, Dave Geology (1974) Dept. of Geology, Western Washington State University, Bellingham, Washington Dave is working toward his Masters in Geology at Western Washington State University. This past summer he fell off his motorbike and hurt himself, but it's excusable. He was on holiday from his summer job, field mapping in the Alaskan wilderness.

Kaminski, Mike Geology (1974) Dept. of Geology, Western Washington University, Bellingham, Washington It's curious that Mike's name follows Johnson's on this list as he is also at Western Washington working on his Masters in Geology, he also is on the Alaskan team -- mapping/prospecting, but he did not fall off his motorbike. Did it really rain continuously in Alaska all summer?

Korving, Geri Earth Science (1973) We've lost track of Geri. At one point she was in New Jersey , but some say she was back in Grand Haven. Geri - where are you?

Lach, Pat Group Science/Geology Emphasis (1969)
Grand Rapids, MI 49504 Are you still teaching Pat?

Losey, Tim Geology (1968)
The last information on record for Tim is that he was finishing his Ph.D. (1st Ph.D. for department graduate) in anthropology at the University of Alberta. He was to direct archaeological salvage operations along the proposed Mackenzie Valley Highway in 1973-74. Tim was serving as editor of Fort Enterprise, a publication of the University of Alberta's Boreal Institute.

Lugthart, Doug Geology/Anthropology (1969) The last information on Doug is that he was enrolled in MSU to pursue a Ph.D. in anthropology.

Markley, Sally Group Science/Geology Emphasis (1973) Sally visited the department July 23. She teaches science to the fourth and sixth grades. You can bet there are some future paleontologists coming from her classes.

Marcus (Haskins), Sue TJC (1973) We count Sue as our alumnus because she began in CAS, finished with a passel of CAS geology courses, and caught Roger! She's still with the old fossil, and also is doing geologic work for the Manitoba Department of Mines, Resources and Environmental Management. Before Sue left Grand Valley her parents donated a beautiful suite of Tertiary fossils.

Martin, Jeff Geology (1975) Jeff will enter a Geology Master's program at Western Michigan University this fall. Preliminary diagnosis indicates that he may have gotten the oil fever during the summer of '74 when he bird-dogged Mike Cowen, a consulting petroleum geologist out of Grand Rppids.

Matthews, Mike Geology (1970)
Mike was employed as a sanitarian for the Ottawa County Health Department but we think he went on the graduate work with wife Susie who completed a B.S. degree in Environmental Science at GVSC.

Morris, Mike Geology (1970) Mike mustered out of the Navy after having seen the world, or at least some points of it such as Puerto Rico and Alaska. Last fall he returned to GVSC to take some additional course work, then to beat the bushes for a job. What's happening Mike?

Olsen, Ken Earth Science (1973) Ken's been through the department a couple of times since graduation to visit. He was working for Capital Financial Service in Grand Rapids on last report. We caught a glimpse of him in a newsreel shopping scene on T.V., but a live report would be welcomed.

Page, Dick Geology (1971) Department of Geology, McMaster University, Hamilton, Ontario, Canada Dick completed his Master's degree at the University of Texas, El Paso in geology. Currently he is working toward a Ph.D. and has spent the last two summers (74-75) mapping in the Sioux Lookout, Ontario region. Dick visits the department when he's through Grand Rapids and has kept us posted on his work through illustrated talks and some rock sample collec-collections.

Pedden, John Geology (1975) If there is a non-believer among you, let him repent! John Pedden did graduate. He then went west with bad company (Sartoris and Schulz) seeking employment. John opted for Uncle Sam, U.S. Army (no kidding), but with the objective of collecting educational benefits under the G.I. Bill (he will be the last man to have qualified). At last report there is a special forces black beret loose in Georgia.

Reck, Don Geology (1974) 5524 E. Sternberg Rd., Fruitport, MI
Don has his own mechanical shop and is doing well. He visits the department occasionally and we almost had him signed up for another course last spring. We'll keep trying Don. Don is a bit of an inventor (a family tradition) as the department's automatic seismic thumper will testify. Maybe Don should contact Frank White.

Rogers, Dave Geology/Math. (1968)
63129 Our records indicate that Dave is a cartographer for the U.S. Dept. of Defense, but its probably supposed to be a secret. He ccmpleted 12 hours of Photogrammetry at the University of Southern Illinois. He and Dick Lefebvre may be our spies in the skies. Dave always wanted to identify rocks in petrology with a little black box. The mere mention of it was always good for an argument with Dick. Paradoxically now Dick is trying to do just that - Via satellite - and having some success. Maybe Dave was right!?! Space petrography lives.

Satterfield, Gloria Group Science (1971) At last report (1973) Gloria was teaching 2nd grade in Grand Haven and being mother to 5 children, including the newest, Claudia Renee' born 8/12/72. Gloria was planning to do some additional course work at GVSC.

Schulz, Bob Geology (1975)
Bob reports from Colorado that he applied to 70-90 companies after graduating. After toughing out several weeks of unemployment, he was offered 5 jobs in a 3 day period. Persistence paid off. He is now working as mud logger and geologist trainee for Monaco Engineering. Bob will be seeing a lot of the Rocky Mountains in the months ahead.

Sinke, Bob Earth Science (1973)
Michigan. Bob visits the department occasionally. At last report he had built a new home in the Grand Rapids area. Carpentry seems to be a common skill among our graduates.

Spruit, Jeff Geology (1975) Jeff was playing drums in a rock band and giving lessons this past summer. He had some applications in to graduate schools but we haven't heard what Jeff's immediate plans are. He received the Senior Award in Geology this past spring.

Thorpe, Doug Geology (1974) Doug entered Arizona State University during the 1975 winter term to begin work toward a Geology Masters degree. He reported good progress during a visit to the department last spring. This summer he worked for Chevron Oil Company out of Denver, although his field work took him to Texas in search of Uranium.

Tondu, Joe Geology (1973) Joe visited the department on July 22, tooling along in a sleek silver Porche. He was already spending those oil dollars he's now earning as a geologist with Getty Oil Company. We hope Joe has finished his Master's thesis by now and will soon be an official University of Texas at Austin alumnus.

Vanderlaan, Steve Group Science (1974) Steve did his practice teaching at the elementary level in the Jenison School System. He was lookin for a teaching position in '75, but we haven't heard from Steve for a while. Where are you?

VerWoert, Dan Geology (1970)
49509 Dan is a geologist for Williams and Works Engineering of Grand Rapids. We see Dan on campus from time to time and he'sintroduced some of our students to the kinds of geohydrology problems he deals with in his work. Are those ponds sealed?

Walters, Dr. Jim Geology (1970) Department of Geology, University of Northern Iowa, Cedar Falls, Iowa 40613 Jim is GVSC's first geoalumnus to go on to complete a Ph.D. in geology (Rutgers University, Spring '75). Jim and his wife visited the department this past summer, enroute to his new position of Assistant Professor of Geology at the University of Northern Iowa. Jim's specialties are Geomorphology and Pleistocene Geology.

Ward, Joann Geology (1975) Joann entered Southern Illinois University this fall with an assistantship to work toward her Master's in Geology. Unfortunately, she suffered a recurrence of retina detachment and faces several weeks of recuperation. She will return to SIU next calendar year.

White, Frank Geology (1970)
Michigan 49506 Our last communication with Frank indicated he was a free spirit (traveling, inventing, generally unemployed). His request was "would like to hear from any of the gang who remember the days of the famous Lost Lake (Laws Lake?) trip."

Williams, Dick Earth Science (1973) Dick's living out on Lake Michigan in a beautiful home with his lovely family, but we're not sure what he's doing to pay the mortgage payments! Mafia?

Woerns, Rolf Geology (1970) 54 Essex St., Apt. 1, London, Ontario, Canada Rolf worked as Title and Deed Searcher for the Planning and Engineering Department in the city of Kitchener, Ontario. Our last communication indicated he had returned to school (London Teachers College) and hoped to start teaching in the fall of 1973.

Zuidgeest, Bob Group Science (1975) Bob just finished his college work this past August.

Kolenbrander, Larry
We have to list Larry as a subway alumni of the geodepartment becaus he was a familiar face in several geology courses. After receiving his B.S. in Environmental Sciences, Larry went on to Colorado State University to work toward an advanced degree. Larry is very active in land use planning projects in the Rockies and is putting his geology to good interdisciplinary use.

McComber, Margaret History major and Geology enthusiast
Margaret also gets honorary subway alumni status because of her departmental identity. Another year or so and we might have stretched her historic time perspective to a geologic scale. Before that happened the McCombers returned to Indonesia to resume their missionary work. Godspeed in your work, and stay away from Krakotoa. Sept. 9th letter indicates that Margaret is back in the U.S. and will try to finish course work at GVSC this fall. Unfortunately, she is undergoing extensive medical examination at the U. of Mo. Medical Center also. We hope its not serious and look forward to seeing her this fall.

Dear GVSC GeoLumnus:

This first newsletter leaves much to be desired, and it is indicative that our alumni files are both incomplete and out-of-date. Would you help us correct that situation?

Please take a few moments to fill in the following information so that we can provide you a bigger and better 1976 newsletter. Also keep us in mind when you make financial contributions to higher education (now that you have an income and pay taxes). Michigan residents should note that contributions to colleges within the state are deductable from state income tax. We have set up a scholarship fund to receive even small contributions.

GVSC Development Office
Geology/Earth Science Scholarship Fund
Grand Valley State Colleges
Allendale, Michigan 49401

Thanks.

Name _____ Graduation Yr. _____ Major _____

Address _____

_____

Marital Status _____ Spouse's Name _____

Children (Names/Ages) _____

Present Activity (graduate student at, employee of, etc.) _____

_____

Business/School Address _____

Additional Information (Graduate degrees, Honors, Awards, Fellowships, Thesis Title, plans, activities of yourself or family, etc.)

_____

_____

_____

Can you update our information for other alumni whose whereabouts are unknown or for whom our information is incorrect?