Quaternary Geologist and Geomorphologist

NEWSLETTER OF THE QUATERNARY GEOLOGY AND GEOMORPHOLOGY DIVISION

Volume 29, no. 1 February 1989

RESULTS OF 1988 DIVISION ELECTION

A total of 1090 ballots were mailed to QG&G voting affiliates for the election of officers and Panel members; 334 valid ballots (31%) were returned. Division officers and Panel members elected for 1989 are:

OFFICERS:

Chairman	Dale F. Ritter
First Vice-Chairman	Kenneth L. Pierce
Second Vice-Chairman	Richard F. Madole
Secretary	John E. Costa

PANEL MEMBERS (1988-90): Julie Brigham-Grette, Vance T. Holliday, Karen L. Prestegaard

CONTINUING PANEL MEMBERS (1987-1989): Jon C. Boothroyd, John J. Clague, W. Hilton Johnson

MANAGEMENT BOARD MEETING DENVER, OCTOBER 1988

The management board meeting of the QG&G Division was called to order by Chairman James C. Knox at 9:05 a.m., Monday, October 31, 1988, in the Matchless Room, Marriott Hotel, during the GSA Annual Meeting in Denver. Attending were: Victor R. Baker, Past Chairman; Dale F. Ritter, First Vice-Chairman, Kenneth L. Pierce, Second Vice-Chairman; Richard F. Madole, Secretary; John E. Costa, Secretary-elect; Jon C. Boothroyd, William L. Graf, and W. Hilton Johnson, Panel Members; Julie Brigham-Grette, Vance T. Holliday, and Karen L. Prestegaard, Panel Members-elect; and E-an Zen, Council/Division Liaison Representative.

The meeting agenda included the following items: (1) approval of minutes of the 1987 Management Board Meeting, (2) verification of 1988-1989 election results, (3) modifications to the application form for the Mackin Grant, (4) procedure for selection of candidates for Distinguished Career Award, (5) National Science Foundation funding for research in Quaternary geology and geomorphology, (6) Division input for selection of members of the editorial board of Geology and board of associate editors of the Bulletin, (7) a request to remove the category "glacial geology" from the GSA abstract form and to retain the categories "Quaternary geology" and "geomorphology", (8) plans for the 1989 Annual Meeting in St. Louis, and (9) appointment of William E. Scott, U.S. Geological Survey, Vancouver, WA, as the new Division Newsletter Editor. Actions taken on some of these items will be discussed further in this or in future newsletters.

MEMBERSHIP

Membership for the Division increased in 1988, from 1435 to 1498. The number of regular members increased, whereas the number of student members and fellows declined. The QG&G Division remains the third largest of the ten Divisions of the Society. The Structural Geology and Tectonics Division is the largest having 2251 affiliates (up 170) and the Hydrogeology Division is the second largest having 1840 affiliates (up 179).

	Oct. 2, 1986	Oct. 2, 1987	Oct. 5, 1988
Members	771	805	867
Fellows	226	213	216
Honorary Fellows	1	1	1
Students	288	305	296
Senior Members	9	9	10
Senior Fellows	98	102	108
TOTAL MEMBERS	1393	1435	1498

Senior Members and Fellows include persons who have reached the age of 70 years and have paid dues for 30 years or more, or who have reached the age of 65 years and have paid dues for 25 years or more, and specifically request exemption from payment of further dues.

QUATERNARY GEOLOGY & GEOMORPHOLOGY DIVISION STATEMENT OF FINANCIAL CONDITION September 30, 1988

Division Fund Balance 12/13/87	$ 285.24	
1988 Division Dues Income	2764.00	
		$ 3049.24
Division Expenses:		
Composition & printing newsletters	1073.84	
Member labels	90.00	
Printing ballot & biodata	118.23	
Postage, handling & envelopes	717.48	
Phoenix - '87 adj.- photos	54.50	
Reimbursement to Division - A. Dreimanis	17.00	
Kirk Bryan Award to Peter W. Birkeland	500.00	
Total division expenses		2537.10
Division Fund Balance 9/30/88		$ 512.14

Note: 50% of the Division Fund Balance will be transferred at year end to the J. Hoover Mackin Appropriated Fund.

J.HOOVER MACKIN APPROPRIATED FUND
STATEMENT OF FINANCIAL CONDITION
September 30, 1988

Fund Balance 12/31/87	$ 8009.41	
Contributions	137.50	
Earnings through 9/30/88	418.70	
Total Fund Resources		$ 8565.61
Grant Awards:		
Jay Stratton Noller	250.00	
Donald Templeton Rodbell	250.00	
Eric A. Oches	500.00	
Total Awards		1000.00
Fund Balance 9/30/88		$ 7565.61

HOW TO HAVE INPUT TO THE DIVISION

1. Submit nominations for Division offices and awards.
2. Submit suggestions, gripes, etc., for consideration by the Division Management Board.
3. Submit contributions to the Division Newsletter.

Correspondence to the Division may be sent to our continuing Division Secretary:

John E. Costa
Cascades Volcano Observatory
U.S. Geological Survey
5400 MacArthur Blvd.
Vancouver, WA 98661

Or you may write directly to the Division Chairman (who changes each year). The present Chairman is:

Dale F. Ritter
Department of Geology
University of Southern Illinois
Carbondale, Ill 62901

Newsletters are mailed in February and August of each year. Members are encouraged to use their Division newsletter to communicate with other members. Deadline for the February Newsletter is January 15 and July 15 for the August Newsletter. Please send information to the Newsletter Editor at the following address:

William E. Scott
Cascades Volcano Observatory
U.S. Geological Survey
5400 MacArthur Blvd.
Vancouver, WA 98661
Phone (206) 696-7909

1988 QG&G DIVISION AWARDS

Presentation of the Kirk Bryan Award to Peter W. Birkeland

Citation by John W. Hawley

Today we are honoring Peter W. Birkeland with the Kirk Bryan Award for his outstanding published contribution to the field of geomorphology and Quaternary studies. Pete Birkeland's 1984 book "Soils and Geomorphology" (Oxford University Press) represents a sustained effort of at least 24 years, starting with a preliminary concept and recognition of need, and ending with a superb product that may still see another edition. This book clearly honors the memory of Kirk Bryan, who with geological colleagues such as Claude Albritton, Jr., recognized that soil phenomena deserved attention by specialists including geologists, physical geographers, archeologists, geotechnical engineers, and others who have worked outside the rather narrow discipline of pedology.

Anyone who has served on the Quaternary Geology and Geomorphology Division Panel (and since 1969, Pete has served for eight years) knows how difficult it is for "textbook-type" publications to even be nominated for this award; however, the book that we are honoring clearly stands out as an original and high-quality contribution to our field of geologic research and education. "Soils and Geomorphology" obviously includes syntheses of information from many published and unpublished sources; but the concept, organization, and execution of this successful textbook can only be credited to the author. It stands on its own as a masterful expression of modern soils-geomorphic research that is respected by pedologists as well as geologists.

The concepts presented and terminology used in "Soils and Geomorphology" are state-of-the-art with respect to pedology and geology. They are solidly based on a large body of both current and "classical" literature and have a distinct international flavor. Most of all, the material presented is invariably seasoned with Pete Birkeland's broad research and teaching experience in the field, laboratory, and classroom. Pete's published and unpublished research (partly in collaboration with colleagues and former students) that forms the book's basic framework covers a wide variety of geologic terranes and geomorphic-process settings, with field-research sites in many parts of western North America, and in several Arctic and South Pacific island areas. Pete has ably tackled problems in such diverse fields as Cenozoic volcano-tectonic processes, clay mineralogy, sedimentary petrology, Quaternary stratigraphy, glacial geology, and pedology. Results from such studies are neatly integrated with current information from outside sources on earth, atmospheric, and biological sciences.

In short, "Soils and Geomorphology" is a graduate- level textbook as well as a basic reference work for professional soil scientists and geologists that gives us the "nitty-gritty" about soils, parent geologic materials, landforms, geomorphic surfaces (relict, buried, and exhumed), and the environmental factors of soil formation (climatic-hydrologic-organic) that affect land surfaces and surficial earth materials over time. In geomorphology and Quaternary studies (including pedology) the entire land surface is an outcrop and we can't cover cover with "cover." From the nominators' perspective "Soils and Geomorphology" is proving to be a very effective tool in helping student and professional alike to discover the real essence of the "cover", whatever it may be, and associated geomorphic surfaces. We consider that this book is, by far, the best and most comprehensive presentation of soil-geomorphic relationships from a broad-based geological perspective; and it is now a standard English-language reference used by many workers in geomorphology, Quaternary geology, geoarcheology, and pedology.

A native of Seattle and a 1958 graduate of the University of Washington, Pete Birkeland had already ascended from the Puget Lowland to the peaks and alpine valleys of the central Sierra Nevada when we first met. He was then working on his doctorate at Stanford. Very appropriately, our first encounter was at the 1960 GSA Meeting, here in Denver, and during a trip sponsored by this Division to see glacial features of the Rocky Mountain National Park area. Because we were delayed by a heavy snow storm, we had some time to exchange ideas on our respective dissertation research areas on the western and eastern margins of the Lake Lahontan basin and in the valleys of the Truckee and Humbolt Rivers. I still believe that our tour leader, Gerry Richmond, who has always been a positive influence on our mutual careers, conjured up that small blizzard. Besides learning that Holocene is just our overblown perception of a small piece of the Pleistocene action, I also recognized that Pete was already a seeker of geopedologic truth.

How does a Quaternary geologist-geomorphologist learn about soil science? was Pete Birkeland's basic question in 1960. I replied that the only way I knew to solve that problem was to become a part-time Aggie at an Aggie-type school. That was easy for me to say since I

was attending one of those schools, the University of Illinois. However, in case some of you don't know it, Stanford isn't your typical Aggie school (and I really haven't heard any complaints about this condition). At any rate, I know that Pete soon decided to develop a practical method of reintegrating geology with the essence of pedology, which deals mainly with the genetic factors of soil formation and the quantitative characterization (including proper classification) of soils, both as small unique bodies of surficial earth materials and as continua of these bodies across the landscape.

Two institutions and many individuals played a significant role in helping Pete reach his goal. On completion of doctoral research in 1962, Pete stepped out into the geopedologic unknown, initiating his research and teaching career at the Department of Soils and Plant Nutrition at the University of California-Berkeley. There he became an instant Assistant Professor of Soil Science, who taught geology, continued to work in the Sierra Nevada and other parts of California, and, best of all, worked with two giants of soil science, Hans Jenny and Rod Arkley. These men had always recognized that late Cenozoic geology, geomorphology, and mineralogy were key components of pedology. In short, they held on to the basic ideals of their program's founder, E.W. Hilgard (1833-1916).

In 1967, Pete went on to still bigger and better things, namely the University of Colorado geology program, becoming a full professor in 1972. At Boulder, he has developed most of his major research programs, and (best of all) expanded his contacts with students on both graduate and undergraduate levels. In 1974 his research and teaching produced the highly successful first edition of "Soils and Geomorphology," then titled "Pedology, weathering, and geomorphological research." The rest of the story is in the book. Pete's recent history includes contacts with my co-nominator, Vance Holliday, and students and colleagues, too numerous to name, who are representative of a small hoard of Birkeland-influenced neogeopedologists, and who make Pete and me very optimistic about the future.

It is clear that Pete Birkeland has accomplished a major life goal, and, in addition, he has built a bridge across the gap between geology and the soil sciences that only developed early in the present century. This bridge has also turned out to be a two-way structure. Pedologists, and even those who are further removed from geologic sanctity, have gained some understanding of and much more respect for our subdiscipline of geology.

On May 9, 1962, I too applied for that job in Berkeley. On May 13, Dr. Jenny responded saying: "Thank you for you letter. Your training and interest would indeed be suitable for a geologist's position in a Soils Department. However, the position in our department was filled last year by Dr. Birkeland, a graduate of Stanford University." So, I went south to New Mexico to work with Lee Gile, Bob Grossman, and Bob Ruhe and to build small geopedological bridges (across the Rio Grande). From that vantage point it has been easy for me to track Pete's career, and watch him build the elegant and useful structure that we are (finally) getting around to honoring today.

Vance Holliday and I are truly proud of our association with Pete and our role in this year's award process; and we thank the panel for also seeing this matter from our perspective. As I present the 1988 Kirk Bryan Award to Peter Birkeland, I must congratulate his very supportive family, especially Sue. In addition, I thank that extended support group known to some as the Mystical Order of the Soil Circle (which in turn owes its very existence to Pete) and ask them to rise with me as we honor the big guy.

Kirk Bryan Award
Acceptance Speech by
Peter W. Birkeland

Thank you, John. I am honored to receive an award in memory of Kirk Bryan for, although few of us knew him, we all admire the impact he has had on geomorphology. This is a humbling experience on two accounts. First is when I think of the works of the previous awardees, all of whom I greatly admire. Second is when I think of the very deserving works that have not been so honored, again by people I greatly admire.

John Andrews told me these talks should be short and light; however, with John Hawley and me on the podium, you can be guaranteed the light, but not the short. What I plan to do is to take you through a few of the stages of my career leading to this day, mentioning those people most responsible for shaping my career. Putting it another way, these people have been my quality control. The lesson is that none of this was planned in advance; rather, I was at the right place at the right time and trusted by the right people.

The first stage of my career was my pre-geology days. My parents were a first-generation Norwegian emigrant father and an Irish mother, one generation from the homeland. Quality starts at home. Independence, hard work, doing the best one can, and quiet support were the family traits I recall. Skiing was our main family activity and racing was the way I pursued the sport. As I entered the University of Washington, I had no idea what to major in besides ski racing, so I foundered academically. An accident shortened my racing career temporarily. In those days we had the military draft, so I got my number called up before my grades dipped out of sight. The Army had these benefits: (a) shaping me up (do not we all need that at times?), (b) learning the true cross-section of the USA population, how I fit into that spectrum, and vowing to do better than average, (c) giving me the opportunity to ski race, and (d) motivating me (and my fellow veterans) to get on with life pronto, following our discharge!

The second stage involves university work, first in the late 1950's as an undergraduate at the University of Washington. I picked geology as a major, for despite my average grade in Introductory Geology, it was interesting and did promise an outdoor career. Time constraints eventually dictated that I chose a geology career over a ski-racing career. I was a summer field assistant to Hank Waldron of the USGS in the Seattle area. Working with him, Rocky Crandell, and Don Mullineaux, I developed an interest both in Quaternary geology and digging holes (hunting volcanic tephra, they told me!!). I also got the message that all work should be considered "in progress", as new concepts require changes, and if that becomes a problem, one should consider a career change. In school I came under the influence of J. Hoover Mackin. He was a brilliant, demanding, and caring professor, and as a junior and senior in his upper division to graduate classes, I matured quickly just to survive his oral inquisitions. Mackin's legacy was to help me develop a critical mind, in the field and with topographic maps, impress me with the importance of visiting students in the field, and a life-long interest in the broad field of geomorphology. One day he included me in a coffee break with his graduate students, and asked me about my future. I figured I was heading for the oil patch, but he would not hear of it and steered (forced?) me to begin graduate work at Stanford University, under his former fellow Columbia graduate student, Art Howard. Art got me started but was overseas for much of my Stanford stay, so Bob Compton eventually took over as thesis advisor. He and Mackin had the task of teaching me to write. Being a skier, it should come as no surprise that my thesis area included the glacial geology of Squaw Valley, site of the 1960 Winter Olympic Games. At this same time I came in contact with Clyde Wahrhaftig, an excellent critic for much of my work then and in later years. It was he and Alan Cox who introduced me to alpine geomorphology, especially rock glaciers. Toward the end of my thesis, Rocky Crandell joined me in the field and showed me how to crack the till-dating code by the use of soils! Thus began my interest in soils, something I have stayed with for almost three decades.

The third stage was obtaining a job. Job opportunities in geomorphology were not plentiful, but with the help of Wahrhaftig I interviewed for a position in the soils department at the University of California, Berkeley--Hans Jenny felt they needed a geologist. Hans is without doubt the leading pedologist in the USA, and an excellent teacher, and under his guidance and that of Rod Arkley, I soon started to combine soils and geomorphology. I extended my thesis studies down the Truckee River to the shores of Pleistocene Lake Lahontan, and there was Roger Morrison. Roger indoctrinated

me in the principles of soil stratigraphy, as he did so many others. My job was now easy--blend the best of Jenny with the best of Morrison.

After 6 years in Berkeley, I got an offer in 1967 to move to the University of Colorado. It was difficult to leave Berkeley, but the greater teaching and research-area opportunities at Boulder were the deciding factors leading to the move. We have a great teaching and research environment, and one cannot find more fun and more critical colleagues to work with than John Andrews, Bill Bradley, Ed Larson, and Ted Walker.

The special part of these past 21 years has been the students I have had both in my classes and as thesis advisees. The latter group is too numerous to name individually, but I think it is a fair statement that few professors have had such a high-quality group of diverse students. I guess the comment of Ted Walker on one of our extended field trips says it all: "Pete, how can your group stay out so late at night doing such crazy things, yet be so alert and hard working the next day?" Do not ask me, but this could go on for a week. Surely they helped me keep from taking my career too seriously, and I countered by keeping them from getting too serious. In addition, we imposed high standards on each other. Together, we have taken on new directions as time has gone on--now it is neotectonics in the western USA and soil-geomorphology studies in Peru. I have encouraged the overseas travel as some of the USA soil-geomorphology sites are getting a bit crowded, and life is fun overseas, and in places exceedingly cheap.

During this time, the first edition of the book was written. Actually, I did not set out to write the book. Instead, I was invited to write a paperback book on soils as part of a series of books on geomorphology. The authors all met and agreed to start writing. Well, (as it turned out) only one author followed through and it became a one-book series! Thanks to my students, we could include a lot of soil-geomorphology relations we had been coming up with in the western USA, and places beyond. So this award is, in part, testimony to their excellent work.

One thing I have admired in my students is that they will take on thesis tasks with little or no support. Much of their work was not well funded, but not because we did not seek funding. Support was often sought but not obtained, as we seldom measured up. Rather than switch direction, however, our motto was that if it was a good enough idea to write a proposal for, it was good enough to do. So who funded a lot of this work? I can list the students and their spouses, the University of Colorado, the U.S. Geological Survey, the Geological Society of America, the National Science Foundation, and Sigma Xi. Former student Ralph Shroba stands as the monument of how to make money last. In two long field seasons traveling from New Mexico to Wyoming on GSA and Sigma Xi funds, he figured he had used all but $50 of the total of $800 in funds!

Because of the present (over) emphasis on funding, I feel especially sorry for young geologists at universities whose survival is tied to outside funding, with the included almighty overhead. Departments and deans are equating worth to funding and overhead generated, making nervous folks out of some of us. What an arbitrary way of measuring quality of work! This book is testimony of what can be done by students and faculty with minimal funding, but with motivation and desire. Actually one of my recent denials turned out alright, as I always wondered if field work could be conducted around the world on a bicycle. We found out it could be done.

Finally, I want to mention my family. Sue and I made a policy decision early in my career, that we would stick together during the summers in the field. As a youngster Karl was carrying so many soil samples out of the Wind River Mountains that I feared his legs would bow. In the Southern Alps of New Zealand, Robin would record field data, and even autograph the rock-weathering-rind histograms she constructed in my notebook. Both have been influenced by our life and life-style; Karl is pursuing snow-avalanche studies and Robin international affairs. Sue has been my special pal and the stabilizing influence in all of this. When we got married 30 years ago, she had travelled the world on the cheap and hoped to continue travelling, but at a more comfortable level. Well, we are travelling the world, sleeping on the ground, hiking and biking to the field areas, and having as much fun as ever! Without her moral support, humor, and field assistance, little of this work could have been done. This family stays together, and I remain sane.

Thank you again for this unexpected honor. I am slowly and happily passing the soil-geomorphology baton on to the next generation of very capable workers. If this work acts as an incentive to others to take soil-geomorphological studies to greater heights, it will have been worth it all. Many of my friends have had a great deal of fun in sharing this honor with me. One comment that stands out was by Rolf Kihl, head of the soils lab at INSTAAR and football pollster: "You know, Pete, you can be number 1 one week and fall out of the top 20 the next!" Although that is true, I plan to carry on with the trust you have put in me with this award.

Presentation of the Distinguished Career Award to A. Lincoln Washburn

Citation by Stephen C. Porter

Mr. Chairman, Link, and fellow geologists:

Webster's International Dictionary provides the following synonyms for the term **distinguished: acclaimed, celebrated, eminent, extraordinary, famous, illustrious, outstanding, prominent, and renowned.** In trying to encapsulate the career of Link Washburn, each of these adjectives seems appropriate. Let me illustrate in a single sentence:

> This **eminent** and widely **acclaimed** scientist, Link Washburn, has had an **extraordinary** career, becoming **famous** through a series of **celebrated** books and **outstanding** scientific papers, his founding of a **prominent** interdisciplinary journal (Quaternary Research), and a long and **distinguished** record of teaching, all of which has led his friends, students, and colleagues to acknowledge his **illustrious** place among the **renowned** earth scientists of his time.

If this array of complimentary adjectives at first seems like a case of overkill, I assure you they are well deserved, for Link is not only a distinguished member of the fraternal order of Quaternary Geologists and Geomorphologists and a long-time Friend of the Pleistocene, he has been an inspiring leader and role model for more than four decades. Since his student days at Dartmouth and Yale, when he first delved into the mysteries of arctic permafrost and patterned ground, his chosen field of Periglacial Research has developed into a major discipline of increasing significance in a changing world. Quadrennially, an international array of more than 800 periglacial scientists convenes to report on new ideas and advances in this strongly interdisciplinary field of research.

As a graduate student at Yale, Link fell under the tutelage of a distinguished faculty that included Carl Dunbar, Adolf Knopf, Chester Longwell, and Richard Flint. His dissertation, based on pioneering field studies in Arctic Canada, was published as a Memoir of the Geological Society of America in 1947. Flint, his major professor and later a faculty colleague, remained a close friend through the years.

Washburn's polar expertise and love of the arctic led him to accept a position as first Executive Director of the Arctic Institute of North America, a post he subsequently relinquished to head SIPRE, the U.S. Army's Snow, Ice, and Permafrost Research Establishment, later to become CRREL, the Cold Regions Research and Engineering Laboratory, in Hanover, New Hampshire. His next major post was on the faculty of his alma mater, Dartmouth College, which harbored a fine collection of polar specialists. From Dartmouth, Link moved on to Yale where he became Director of Graduate Studies in the Department of Geology.

A significant turn in his career came when he joined the University of Washington in 1967. Capitalizing on the enthusiasm

generated by the 1965 Boulder INQUA Congress and on the presence of a diverse faculty interested in varied aspects of Quaternary-related research, Link encouraged the administration to establish the Quaternary Research Center, the first such university group in this country organized to promote interdisciplinary research focussed on Quaternary problems. At latest count, the number of similar organizations has increased to more than 15. An integral part of the QRC is its Periglacial Laboratory which Link designed and used for experimental investigations of frozen ground.

Sensing the need for a scientific journal devoted to Quaternary research, Link obtained an NSF grant to help establish **Quaternary Research**, the first issue of which appeared in 1970. He shepherded the journal through its first five years, establishing for it a reputation for breadth and excellence, and making it one of the highest ranked earth science publications in the Citation Index.

Link's research activities have always been focussed on the polar regions. His long-term studies of patterned ground in eastern Greenland led to a series of publications that earned him the Kirk Bryan Award in 1971. A further outcome of his studies has been his book on **Cryogeology** which, like its predecessor, **Periglacial Processes and Environments**, became the standard reference in the field and has gained him worldwide recognition. In recent years he has started a new project at Resolute on Cornwallis Island in the Canadian North. On all his far-flung field projects, Link's most enthusiastic and engaging field assistant has been his wife Tahoe, who, Link likes to emphasize, is the primary reason for his success. For those fortunate enough to have shared the Washburn's warmth and hospitality, whether at home or in the field, the experience has always been memorable.

Link's friends and colleagues have long recognized the significant contributions to science and his singular efforts on the behalf of many national and international organizations. As a consequence he has served as Chairman of the Polar Research Board of the National Academy of Sciences, President of the American Quaternary Association, and Vice President of the International Union for Quaternary Research. He is an Honorary Member of INQUA, the Arctic Institute of North America, and the International Glaciological Society.

The latest entry to Link's long and impressive curriculum vita was generated when President Reagan appointed him to the five-member U.S. Arctic Commission which was charged with formulating an American Arctic policy. At a time when many of his contemporaries are content to retire from active life, Link is continually off on new adventures and keeps a schedule that would exhaust many of his younger colleagues.

As is plain to see, Link Washburn is **acclaimed, celebrated, eminent, extraordinary, famous, illustrious, outstanding, prominent, renowned**, and clearly **distinguished**. It is therefore most fitting that the Quaternary Geology and Geomorphology Division honor him today with its Distinguished Career Award.

Distinguished Career Award
Acceptance Speech by
A. Lincoln Washburn

Mr. Chairman, Steve, Colleagues:

To be honored by one's peers by receiving the Quaternary Geology and Geomorphology Division's Distinguished Career Award is a signal honor I shall always treasure, not only because of what it stands for but also because of the enduring fellowship the Division has represented for Tahoe and myself over the years.

I had just stopped off at the Quaternary Research Center enroute back to fieldwork on Cornwallis Island in Canada's High Arctic last summer, Mr. Chairman, when I received your letter of notification. It took me by complete surprise and left me wondering whether my work really approached the standards set by my predecessors, Dick Goldthwait and Alexis Dreimanis. However, I quickly decided not to analyze the situation, since my failure to meet at least some minimum qualifications impugned the wisdom of the Division--which God forbid. Also, I could outweigh some reservations by rationalizing that the term "career" implied a span of years, and that many of you have accomplished eminently distinguished work but have yet to meet the age requirement. Thus my conscience was assuaged and I accepted with alacrity your invitation to join you here today.

In fact Tahoe and I had already been planning to attend this 100th anniversary meeting of the Society, since we had attended the 50th anniversary meeting and had begun to experience the law that time accelerates with the advancing age of the observer.

Since we are all accustomed to informal field talk, perhaps you will excuse my citing another law related to age--namely, the four transitional stages of memory as cited by the recent director of an illustrious national geological survey. I plead guilty to the first stage only, namely when one begins to forget names. The second stage is when one begins to forget faces, the third when one forgets to zip up after nature's call, and the fourth when one forgets to zip down.

A long career provides the opportunity to look back on one's motivations, one's mistakes, and one's successes. The mistakes and successes I shall leave to others except to admit that today's award gives me hope that the good outweighs the bad.

An inkling of career motivation was manifested at a tender age by the wish to learn of the inner working of things by taking watches apart but rarely putting them back together in working order. The first real thrill and wonder, however, was generated by astronomy because of its all-encompassing perspective. Flammarion's popular review, read at age 12 or 13, opened the universe. The second thrill and wonder was geology, which also encompassed the universe--the intertwined history of the inanimate and animate down to the present day, combined with the possibility of physically touching the field evidence in unexplored regions, whether geographical or topical. To test the forefront of knowledge for even a brief period, particularly when the subject matter concerned the intimate workings of nature, provided both a motivation and a challenge that may sound trite and therefore superficial but which were, and still are, deep and real for me, perhaps also influenced by an early love for the flow of things as in inspired art and poetry.

Thanks to my parents, various careers were open to me, and I could afford to be selfish about choosing one. But a child's wonder at the workings of a watch, later looking at the heavens, and then at the earth, and still later recognizing that life could, and in my case should, be more than athletics and immediate activities, however stimulating, led an indifferent student to become increasingly motivated. I then had the privilege of studying at Dartmouth under Walter Goldthwait, Dick's father, who was a model of objectivity. For years he held to marginal retreat of the continental ice in New England as opposed to increasing evidence for downwasting and stagnation. Consequently, I was tremendously impressed when he gave a lecture in which he argued that the evidence against strict marginal recession was becoming compelling in his opinion. To argue thus--after a lifetime of work tending to support the contrary view--was a lesson in scientific objectivity and in how to address opposing views on their merits without becoming irritated at the other fellow!

The orientation toward the North as a particular natural environment of interest followed two trips to Alaska in 1934 and 1935. All this set the stage for graduate work at Yale with Dick Flint when I had the privilege of visiting Northeast Greenland as his assistant and of benefitting from his keen analytical mind and scientific guidance. This led to a fun career and to the very satisfying work I look forward to each day. To paraphrase one of Charlie Hunt's comments while on a trip with him in Death Valley--Damn it, research is fun!

Although my work was a selfish choice in which, to be sure, the wish to contribute to knowledge was basic, the choice did not immediately strike me as necessarily advancing society in other ways.

Today's world seems to be in a muddle where selfishness abounds and is responsible for many ills, and the need to be of service to society and one's country is perhaps as compelling as ever before in time of relative peace. Thus I sometimes wondered whether I was doing my share of service, which is perhaps why I have devoted considerable time to science-related administration in the thought it might help to advance science generally rather than just my particular field. For science has a fantastic responsibility to society, including help in maintaining a peaceful world.

I have now come to believe that almost any field of science can make a significant contribution, and that the work of our Division is as important as any because of the perspective it provides on the natural environment and its intertwined history and flux of animate and inanimate changes of which we are a part.

Consequently, I consider myself blessed to be able to continue the joy of fieldwork and research--and now doubly blessed because of the honor you have bestowed upon me. I share the award with Tahoe, my sine qua non, since the work is also hers and she has been, and continues to be, the best field and life companion I could have ever hoped to have.

FRIENDS OF THE PLEISTOCENE 1989 FIELD TRIPS

South-Central Cell: April 7-9, 1989

Geomorphology of granitic landforms and alluvial and cave stratigraphy in the heart of the Texas Hill Country near Fredricksburg. The trip for Day 1 will be led by James Peterson (Southwest Texas State University) to Enchanted Rock, an exfoliation dome of Precambrian granite. Day 2's topic will be alluvial stratigraphy (middle Pleistocene to late Holocene), soils, and sedimentology of the Pedernales River and will be led by Michael Blum (University of Texas at Austin). Richard Toomey (University of Texas at Austin) will lead a half-day trip on Day 3 to see deposits in Hall's Cave that contain a rare Pleistocene/Holocene transition fauna. Contact Steve Hall (Department of Geography, University of Texas, Austin, TX 78712; phone (512) 471-5116) or Tom Gustavson (phone (512) 471-7721) for registration forms or additional information.

Midwest Cell: May 12-14, 1989

Quaternary geology of northeastern North Dakota, focusing on a variety of late Pleistocene features on and adjacent to the Coteau des Prairies. Topics for Day 1 include landforms and deposits of the late Wisconsin Des Moines Lobe that flank the eastern side of the Coteau, pre-Des Moines Lobe till stratigraphy in the Minnesota River valley, and the Bemis and Altamont moraines. Day 2 will focus on deposits of the James Lobe that moved onto the Coteau from the west, ice-stagnation features, pre-Wisconsin till plains in the valley of the Big Sioux River, and the 400-700 feet of drift that core the Coteau. Estimated cost for guidebook, meals, lodging, transportation, and refreshments is about $50, with a 10-20 percent student discount. Registration deadline is in April. For more information and registration materials contact Jay Gilbertson, South Dakota Geological Survey, Science Center, University of South Dakota, Vermillion, South Dakota 57069-2390 Phone (605) 677-5227.

Pacific Cell: April 7-9, 1989

Quaternary stratigraphy, soil geomorphology, chronology, and tectonics of the Frazier Mountain, Wheeler Ridge, and San Emigdio Canyon areas, western Transverse Ranges, California. The three-day trip will involve evaluation of the tectonic geomorphology of the central highlands of the western Transverse Ranges as well as the active fold-and-thrust belt on the northern flank of the ranges. Leaders are E.A. Keller (University of California, Santa Barbara, temporarily at California State University, Fresno), Don Johnson (University of Illinois), Tom Rockwell (California State University, San Diego), Dennis Laduzinsky, Din Seaver, Rick Zepeda, and Xiaolin Zhao (all University of California, Santa Barbara), and Scott Lindvall (California State University, San Diego). The leaders have warned potential participants about the possibility of contracting Valley Fever in the area, offer some recommendations about dust suppression (dust carries the spores from which the disease is contracted), dust masks, and skin tests for immunity. All participants attend at their own risk. The registration deadline is March 10 and may have passed by the time you read this notice.

Rocky Mountain Cell: August 13-23, 1989

Quaternary geology of the Wind River Mountains, Wyoming--the touchstone of the Rocky Mountain glacial sequence. This trip wins the award for the longest and most option-filled FOP trip ever. Five separate trips are planned that include both backpack and roadside attractions. The focus of all trips is Pleistocene and Holocene glacial stratigraphy. Leaders will be Bill Mahaney, Gerry Richmond, Curt Sorenson, Dennis Dahms, Bob Hall, Ralph Shroba, Dave Swanson, Pete Birkeland, Tom Davis, and Greg Zielinski. A first announcement has been mailed out and must be returned by March 15. A second announcement with registration form will be mailed out in late spring. For more information and a copy of the first announcement contact Pete Birkeland, Department of Geological Sciences, Campus Box 250, University of Colorado, Boulder, CO 80309-0250.

Southeast Cell: November 17-19, 1989

Slope evolution in the New River Valley of the Ridge and Valley Province of Virginia. The trip begins with an evening meeting on the 17th. The trip on the 18th will be led by Hugh Mills (Tennessee Tech) and will focus on terraces, weathering, slope processes and deposits, and perhaps periglacial features. Art Schultz (USGS-Reston) will lead the trip on the 19th to examine mega-landslides, which are an important process in slope evolution in the area. The first announcement will be mailed out in February. If you would like to be added to the mailing list, contact Steve Kite, Department of Geology and Geography, West Virginia University, Morgantown, WV 26506. If you need specific information about the trip, contact Art Schultz, U.S. Geological Survey, National Center, Mail Stop 926, Reston, VA 22092; phone (703) 648-6501.

1990 SE FOP: Jim Quinlan (Uplands Research Lab) has agreed to run the 1990 SE FOP field trip at Mammoth Cave, Kentucky. Jim as promised an inexpensive trip that will include both above-ground and underground sites.

Report on 1988 SEFOP conference: The 2nd annual SEFOP field conference was held on November 11-13 in Hammonton, New Jersey. Leaders were Wayne Newell, John Wyckoff, and Jim Owens of the USGS and John Farnsworth of the NJGS. The focus of the conference was the late Tertiary and Quaternary geologic framework of the southern New Jersey Coastal Plain and the influence of weathering and erosion on landscape evolution. More than 65 scientists representing academic institutions from New York to Tennessee; State surveys from New Jersey to Virginia; federal agencies including the USGS, Nuclear Regulatory Commission, and Soil Conservation Service; and several geotechnical consulting firms attended the conference. (Condensed from a conference summary prepared by John Wycoff.)

NOMINATIONS FOR DISTINGUISHED CAREER AWARD DEADLINE APRIL 15, 1989

The Distinguished Career Award was established in 1985 to recognize Quaternary geologists and geomorphologists who have demonstrated excellence in their contributions to science. This award complements the Kirk Bryan Award, which is for a single paper, by recognizing many years of distinguished contributions. The award is called the Distinguished Career Award because the Society bylaws allow for only one "named" award per Division, and the Kirk Bryan award is our Division's named award.

The Distinguished Career Award is open to all Quaternary

geologists and geomorphologists who have demonstrated excellence in their contributions to science. The recipient need not be a member of the Geological Society of America or the QG&G Division. This is the fourth year for the DCA; former recipients are Richard P. Goldthwait (1986), Aleksis Dreimanis (1987), and A. Lincoln Washburn (1988).

Nominations for the award will be accepted at any time during the year, but the deadline for this year (ONLY) will be April 15, 1989. Nominations should be submitted to the Division Secretary. The nominator
should assemble the following for the candidate: (l) a brief biographical sketch, which may be photocopied from American Men and Women of Science, (2) a statement of no more than 200 words describing the candidate's scientific contributions to Quaternary geology and geomorphology, (3) a selected bibliography of no more than 20 titles, and (4) three letters of support from colleagues. The names of unsuccessful candidates proposed for this award will remain open to consideration without renomination for the three following years. Further consideration after this period will require renomination.

1989 ANNUAL GSA MEETING IN ST. LOUIS

As a logical sequel to the Centennial theme of the 1988 Annual Meeting, the theme of the 1989 Annual Meeting will be "Frontiers in Geosciences". The local organizing committee hopes that a new focus can be established for GSA Annual Meetings by exploiting the concept of theme symposia.

The technical program schedule will appear in the September and October issues of GSA News and Information. The QG&G Division Symposium will be on the contributions of T.C. Chamberlin and is being organized by Allan F. Schneider of the University of Wisconsin, Parkside.

ABSTRACT DEADLINE FOR THE 1989 ANNUAL MEETING CHANGED TO JULY 19

In response to repeated requests that the abstract deadline for the Annual Meeting be closer to the meeting, the Society has revised its production and mailing procedures to accomplish this goal. Abstracts for the 1989 Annual Meeting in St. Louis are due at GSA Headquarters on July 19, 1989, and speakers will receive acceptance notification around Labor Day. Abstract forms are available from Abstracts Secretary, Geological Society of America, P.O. Box 9140, Boulder, CO 80301.

SHORT COURSES FOR GSA ANNUAL AND SECTIONAL MEETINGS

Short courses may be conducted in conjunction with all annual or sectional meetings. The GSA Committee on Short Courses invites those members interested in proposing a short course to contact GSA headquarters for proposal guidelines. The proposal deadline for the 1989 Annual Meeting in St. Louis has passed, but proposals for the 1990 Annual Meeting in Dallas will probably be due in December 1989. Announcements are made in GSA News and Information. Whereas the Division is limited to sponsoring only one symposium at annual meetings, short courses have no such restriction.

Short course proposal guidelines can be obtained at any time from Meetings Department, Geological Society of America, P.O. Box 9140, Boulder, CO 80301.

DO YOU REMEMBER WHEN?

Do you remember when the term mass movement was first introduced into general use? It was 50 years ago, in 1938, in a book titled "Landslides and Related Phenomena, a Study of Mass Movements of Soil and Rock" by C.F. Stewart Sharpe. In a recent note to the Editor, Dr. Sharpe stated he "did not invent the term mass movement but put it into the general vocabulary to cover the whole field of landslide-related processes. The concept and the term mass movement have proven useful over the fifty year period and are still going strong."

Truly, it is very appropriate to note the fifty years of mass movement along with the 1988 Centennial Celebration. We can all thank Dr. Sharpe for this most basic thought provoking and all-encompassing term and concept.

From A.G. Keene, Editor
The Engineering Geologist
(GSA Eng. Geol. Div.)

CANQUA 1989 INVITATION TO EDMONTON

The 1989 Biennial Meeting of CANQUA, the Canadian Quaternary Association, will be held at the University of Alberta, Edmonton, August 26-27. A three-day field trip will follow the meeting. The theme of the conference is "Late Glacial and Post-Glacial Processes and Environments in Montane and Adjacent Areas". N.W. Rutter is the Chairman of the Organizing Committee.

The program will consist of four sessions of oral presentations--Quaternary landscapes and sediments, Quaternary environments, mountains and people, and general. There will also be two poster sessions. The abstract deadline is April 1, 1989. The three-day field excursion will begin in Edmonton, head west to Jasper National Park, then head south to the Columbia Icefields, and end in Edmonton. Participants will see glacio-tectonic features, glacial and nonglacial deposits and landforms, the Athabasca and other active glaciers, stratigraphic successions encompassing units from pre-Wisconsinan to Holocene, the Kootenay Plains, and fine mountain scenery. Leaders are Brian Luckman (University of Western Ontario and Geological Survey of Canada) and Vic Levson and other researchers from the University of Alberta.

The first and final circular for the meeting has been mailed out, for a copy or more information contact:

Norm Catto
Program Co-Ordinator, 1989 CANQUA Conference
Department of Geology
University of Alberta
Edmonton, Alberta
T6G 2E3
Phone (403) 432-3085 or 4993

SPECIAL RATES FOR "GEOARCHAEOLOGY"

Members of the Division are eligible for discount group rates on personal subscriptions to the journal "Geoarchaeology". The special rates for volume 4 (1989) are $48 for members in U.S. and $68 for members outside U.S. (compare with regular rates of $112 and $143). Members interested in this offer may send their orders to Periodicals Division, John Wiley & Sons, Inc., P.O. Box 836, Bound Brook, New Jersey 08805, and identify themselves as members of the Quaternary Geology and Geomorphology Division.

IN MEMORIAM

Randolph W. Chapman
(date unknown)

Ronald R. Dilamarter
December 12, 1987

John F. Hall
July 12, 1988

Russell F. Kaiser
July 26, 1988

Keith L. Katzer
July 8, 1988

Valmore C. Lamarche, Jr.
March 24, 1988

John P. Lenzer
January 9, 1988

Walter S. Newman
May 29, 1987

W. Armstrong Price
November 1, 1987

William D. Thornbury
November 12, 1986

1989 GSA SECTION MEETINGS-- ITEMS OF INTEREST TO QG&G MEMBERS

South-Central: Arlington, Texas March 12-14

Symposium: Archeological Geology of the Southern Midcontinent

Field Trip: Archeological Geology in the Upper Trinity Basin

Northeastern: New Brunswick, New Jersey March 23-25

Symposia: Long Island Sound: Postglacial Evolution and Sea-Level Changes: A Symposium in Honor of Walter S. Newman

Barrier Islands: Their Origin and Development in Light of the Coastal Compartment Model: A Symposium in Honor of John J. Fisher

Neotectonics, Seismogenesis, and Earthquake Hazards in Northeastern North America

Paleosols

Depositional Sequences on the Middle Atlantic Continental Margin

Field Trip: New Jersey's Northern Coast: Recent Coastal Processes and Coastal Zone Management

North-Central: Notre Dame, Indiana April 20-21

Symposia: Shoreline Behavior in Response to Lake-Level Variations, Modern and Ancient

Applied Quaternary Geology and Geophysics

Field Trips: Shoreline Deposition and Erosion in Northwest Indiana

Glacial Terrain Models in North-Central Indiana: Vertical Sequences Derived from Downhole Geophysics, Linked to Landscapes and Near-Surface Stratigraphy

Cordilleran and Rocky Mountain Spokane, Washington May 8-11

Symposia: Use of Soils for Correlation and Interpretation of Quaternary Geologic Events

Earthquake-Induced Landslides
Geoarcheological Research in the Pacific Northwest

Theme Sessions: Neotectonics of the Cascadia Subduction Zone

Quaternary Catastrophic Floods Generated by the Failure of Natural Dams in the Western United States

Field Trips: Aerial Overview of the Channeled Scablands and the Grand Coulee

Lake Missoula Floods and Channeled Scablands: (A) Evidence for Ice Dam and Floods in the Purcell Trench; (B) Glacial and Multiple Flood History of the Northern Borderlands; (C) Loess Stratigraphy and the Flood Record

Geology and Landslide Mitigation at Grand Coulee Dam

Subaqueous Basalt Eruptions in the Western Snake River Plain and Evidence for Existence of Pliocene Lake Idaho

ALTERNATIVES FOR INTERNATIONAL GEOMORPHOLOGY ORGANIZATION

The Working Committee for International Collaboration in Geomorphology was established in 1985 at the First International Conference on Geomorphology in Manchester, U.K. Following correspondence with national societies and corresponding members, the committee has developed several alternatives for an international geomorphology organization. Jim Knox, the U.S. Corresponding Member to the Committee, has requested comments from the Division about the Committee's ideas. Send your comments to Dusty Ritter so that he can furnish Jim with the Division's views. Presentation of final proposals, debate, and voting will take place during the Second International Conference on Geomorphology, to be held in Frankfurt, Federal Republic of Germany, September 3-9. 1989. Each national representative will have one vote in determining the final form of the organization.

The objectives of all three alternatives are essentially the same, namely to promote international cooperation and communication in geomorphology and to ensure that an International Conference on Geomorphology is held at least every four years. The alternatives differ mainly in the formality of their organizational structure.

(1) A formal International Association of Geomorphologists organized under the rules of the International Council of Scientific Unions. Membership would be through so-called Adhering National Bodies (ANB), of which there would only be one per country. Each nation would determine its ANB (in the U.S., probably either the Geological Society of America or the Association of American Geographers) and each ANB would have one vote. The Association would have seven elected officers, each from a different nation.

(2) An independent International Society of Geomorphologists organized as an institution of individual fee-paying members; in certain instances, each member would have one vote. Appointment of officers, admission of new commissions and sub-commissions, and other duties would be the responsibility of a council consisting of the officers, honorary members of the Society, and one member from each sustaining body (national society, corporation, or other agency). The scientific work of the Society would be carried out through various Commissions, each of which would represent a particular branch of geomorphology.

(3) An Informal Committee elected once every four years to carry out the basic tasks of communication and organizing a 4-year conference. This is the status quo.

Send your comments to our Division Chairman:

Dale F. Ritter
Department of Geology
Southern Illinois University
Carbondale, Ill 62901

GLACIAL GEOLOGY OF DOWN EAST MAINE

A field seminar on aspects of the glacial geology of Down East Maine will be held August 20-26, 1989, at the Eagle Hill Wildlife Research Station near Steuben, Maine. Harold Borns (Program Manager of Polar Glaciology, National Science Foundation, presently on leave from the University of Maine) will lead the seminar, which will focus on evidence of ice ages along the coast, glacial and deglacial events, and sea level changes. Cost of the seminar is $420 and includes tuition and lodging and meals at the station, which is located on the highest point of a peninsula, east of Bar Harbor. Scholarships are available. For additional information contact the Eagle Hill Wildlife Research Station, Steuben, ME 04680; Phone (207) 546-2821

THE GEOLOGICAL SOCIETY OF AMERICA

1989 ANNUAL MEETING

St. Louis, Missouri
November 6-November 9

Abstracts Due
July 19

Program, Housing
and Registration Information
August 1

Preregistration Due
October 6

Associated Societies Meeting with GSA

Association for Women Geoscientists • Geoscience Information Society
Sigma Gamma Epsilon • Cushman Foundation
Mineralogical Society of America • Society of Economic Geologists
Geochemical Society • National Association of Geology Teachers
Paleontological Society

For Information
GSA Meeting Department
P.O. Box 9140
Boulder, CO 80301
(303) 447-2020