Quaternary Geologist and Geomorphologist

NEWSLETTER OF THE QUATERNARY GEOLOGY AND GEOMORPHOLOGY DIVISION

Volume 23, no. 1 January 1983

QUATERNARY GEOLOGY AND GEOMORPHOLOGY DIVISION ELECTIONS

Division officers and members of the Panel elected for 1983 by the membership are:

Chairman.....John T. Andrews
First Vice-Chairman.....Don J. Easterbrook
Second Vice-Chairman.....Donald F. Eschman
Secretary.....Richard F. Madole

New Panel Members (1982-84):
Thomas H. Hamilton
Robert C. Palmquist
Dale F. Ritter

Returning Panel Members (1981-83):
Robert F. Black
Joseph H. Hartshorn
Nathaniel W. Rutter

Retiring Panel Members
Edward B. Evenson
George I. Smith
Allan F. Schneider

NOMINATIONS FOR 1983 PANEL MEMBERS

Clip out and mail this ballot before March 15, 1983, to: Richard F. Madole
U.S. Geological Survey
Box 25046, MS 913
Denver, CO 80225

All voting affiliates (dues paying members) are eligible for nomination to the Panel except officers and present or retiring Panel members (officers and previous Panels are listed elsewhere in this Newsletter). The six names receiving the highest number of votes will appear on the annual ballot. Each voting affiliate of the Division may nominate up to three persons.

(1) _____

(2) _____

(3) _____

COMPLAINTS DEPARTMENT

A total of 890 ballots were mailed to Division members for the 1982 election of Officers and Panel. Ballots returned totaled 349, of which four were invalid. The four invalid ballots may be regarded as protests inasmuch as they contained the following remarks: "Why so many USGS?"; "What about including some Quaternary paleoecologists in the future?"; "I note with dismay an all male slate! Come on guys there are female geomorphologists out here and there!"; "In my opinion, no organization, large or small, should ever be represented by more than one nominee--three USGS nominees is too many!"

The thoughts registered on the four invalid ballots were probably shared by many members. The criticism is valid and identifies a problem that requires attention. For whatever reasons, too few members participate in the nominating procedure. Each year a form for nominating candidates for the Division Panel is included in the January Newsletter. In 1982, about 5 percent of the Division membership made nominations. Whereas the Nomination Committee appointed by the Division Chairman selects candidates for Second Vice-Chairman and Secretary, the membership selects the candidates for the Division Panel. The six members receiving the most nominations are asked if they are willing to serve, and if so, their names go on the ballot.

The principal responsibility of the Division Panel is to decide the Kirk Bryan Award, but in addition they form the nucleus of the committees appointed by the Chairman and provide valuable advice in the matters of business brought before the Management Board. The work of the Division Panel benefits when its members are widely distributed geographically and have varied research interests and institutional affiliations. In the past, balloting has tended to produce balanced representation on Division Panels, but sometimes while operating within narrow limits. Hence, you are urged to use the nomination form included in this Newsletter. Also, you are urged to make complaints known to the Division Chairman or Secretary so that they may be considered for action by the Management Board or shared with the membership in future Newsletters.

MEMBERSHIP

As of November 30, 1982, the Division membership was 1,084, which includes 621 members, 304 fellows, 2 honorary fellows, and 157 students. This is 51 fewer members than are listed in the 1982 Society Membership Directory. Our Division is the third largest of the nine divisions. Structural Geology and Tectonics is the largest division with 1,437 members, and Engineering Geology is the second largest division with 1,171 members.

1982 KIRK BRYAN AWARD CITATION

The Kirk Bryan Award for 1982 was presented to Kenneth L. Pierce at the Division luncheon in New Orleans, October 20, for his paper "History and Dynamics of Glaciation in the Northern Yellowstone Park Area" published in 1979 as U.S. Geological Survey Professional Paper 729-F.

Citation by Dwight R. Crandell

When most people think of Yellowstone National Park, images are evoked of waterfalls, bears, and, above all, geysers and other thermal features. In the context of the Yellowstone of today, it is hard to visualize a landscape buried by glaciers thousands of feet thick. Yet, this is just what Ken Pierce asks us to imagine: northern Yellowstone covered by ice caps feeding the longest Pleistocene glacier of the 48 contiguous United States.

In 1965, the U.S. Geological Survey was gearing up to undertake a major study of all aspects of the geology of Yellowstone Park. Already a member of the USGS, Ken was invited to join Gerald M. Richmond in studying the surficial deposits of the park. After a summer of mapping three 15-minute quadrangles in southeastern Yellowstone and benefiting from Gerry's years of experience in the Pleistocene of the Rocky Mountains, Ken began independent studies in northern Yellowstone that included mapping surficial deposits in five additional quadrangles. One product of Ken's work is the report that has been selected to receive this year's Kirk Bryan Award, "History and Dynamics of Glaciation in the Northern Yellowstone National Park Area," published in 1979 as U.S. Geological Survey Professional Paper 729-E.

Ken Pierce's Professional Paper is not a typical description of glacial deposits and reconstruction of Pleistocene glaciers. Instead, he went to some unusual lengths in his study, in part because he was testing some concepts of glacier size in this area which had been held by a number of well known and respected Pleistocene geologists. Thus, Ken found himself challenging conventional wisdom, which requires skill as well as intestinal fortitude.

Of particular interest in Ken's report is his reconstruction of the last, or Pinedale, massive glacier to cover northern Yellowstone, and its extension downvalley outside the park. This glacier was fed by four major ice-cap-accumulation areas, and the proportion of ice from each source changed from maximum glacial conditions through subsequent stages as the glacier receded. He found that this caused ice from some source areas to invade areas, during recession, that had previosuly been occupied by ice from a different source.

In reconstructing a Pinedale glacier larger than that envisaged by previous workers, Ken challenged what he says is a propensity among some glacial geologists in the Rocky Mountains to see Bull Lake end moraines downstream from Pinedale moraines in every valley despite little or no good evidence of an appreciable age difference between these moraines. On the contrary, in the Yellowstone valley, Ken found that Pinedale ice had extended farther than the Bull Lake glacier. He used a variety of approaches to establish this relationship, and concluded by verifying that such a large Pinedale glacier was both physically reasonable and consistent with its expectable basal shear stress and mass balance inferred by analogy with data from modern glaciers. The results add up to a fine piece of research that is eminently deserving of the Kirk Bryan Award. I congratulate you on behalf of the Division of Quaternary Geology and Geomorphology.

MACKIN GRANT APPLICATIONS FOR 1983

The deadline for receipt of applications for the Mackin Grant for research in geomorphology or Quaternary geology is February 15. Two awards will be made, one to a Master's degree candidate and one to a Ph. D. candidate. Winners will be decided by April 1, 1983.

Application forms may be obtained from the Division Secretary, Richard F. Madole, U.S. Geological Survey, Box 25046, MS 913, Denver, CO 80225. Information required with the application includes: (1) a resume of the applicant, (2) statement of proposed research, and (3) a letter of reference from the thesis advisor.

COLE GRANT APPLICATIONS FOR 1983

Application forms for the Cole Grant may be obtained from the Executive Director, The Geological Society of America, P.O. Box 9140, Boulder, CO 80301; Phone (303)447-2020. Applications must be postmarked by February 15, 1983, to be eligible. This award will be restricted to investigation of the geomorphology of semiarid and arid terrains in the United States and Mexico. It will be given each year to a GSA Fellow between 35 and 60 years of age who has published one or more significant papers on geomorphology. Funds cannot be used for work already accomplished. The grant will be for $1,000 or more, depending upon the amount of interest accumulated in the Cole Grant fund.

NOMINATIONS FOR THE KIRK BRYAN AWARD FOR 1983

Nominations for the Kirk Bryan Award for 1983 will be accepted until January 31, 1983. Any member may nominate a paper for the Kirk Bryan Award at any time simply by identifying the paper and supplying a statement about its significance. Send the nomination to the Division Secretary, Richard F. Madole, U.S. Geological Survey, Box 25046, MS 913, Denver, CO 80225. The Kirk Bryan Award is for a specific paper, rather than for many years of distinguished contributions, published within the past 5 years. Papers written by more than one person are eligible for nomination.

THE QG AND G DIVISION, ITS HISTORY AND PURPOSE

A petition to establish a Group (now Division) on Geomorphology was presented to the Society Council at its April 1955 meeting, and the bylaws were approved in April 1956. Elliot Blackwelder became the first Chairman of the newly formed Group in 1955. In May 1970, the name of the organization was changed to the Quaternary Geology and Geomorphology Division. Through the 27 years of its existence, the organization has grown in membership and scope. The Division is now third largest of the nine divisions of the Society, and actively promotes the advancement of its science by sponsoring meetings, symposia, field trips, and research grants.

According to Article I of the bylaws, "the purpose of the division is to bring together scientists interested in Quaternary geology and geomorphology, to facilitate presentation and discussion of their problems and ideas, to promote research and publication of results in those fields of geology, and to advise and assist the officers and committees of the Society in matters pertaining to Quaternary geology and geomorphology." An important point here is that the division structure provides members with a means, acting individually or collectively through the Division Chairman, to promote any of the activities identified in the bylaws, with the Society as a whole or within the Division.

BUDGET

At the end of calendar year 1981, the Division resources totaled $6,993.20. In accordance with decisions made at the 1981 Annual Meeting in Cincinnati, half of these funds were transferred to the J. Hoover Mackin Fund to meet the increased demand imposed by the decision to award two Mackin Grants annually. Income from dues received through September 30, 1982, was $1,998, bringing the total of Division resources and income for 1982 to $5,494.60. Division expenses incurred through September 30 totaled $995.85, leaving a balance of $4,498.75.

After the transfer of funds noted above, the J. Hoover Mackin Fund contained $5,515.19. The Fund earned $193.72 in interest through September 30, 1982, and dispersed $1,000 in grants of $500 each to James S. Kite and Thomas F. Bullard.

COMMITTEE APPOINTED FOR DIVISION DNAG PROJECT

The request for suggestions for the Division project for the Decade of North American Geology made in the June 1982 Newsletter resulted in receipt of nine letters containing a broad range of good ideas. These letters stimulated additional input at the Annual Meeting in New Orleans, where Troy Pewe and John Andrews jointly appointed a committee to oversee the complex task of deciding upon the theme and contents of a Division volume. The committee is composed of Nat Rutter (Chairman), Marie Morisawa, Will Graf, and Rich Madole. The committee may be expanded as the need arises. Ideas are still being solicited, but contributions should be made as early in January 1983 as possible. If interested, contact Nat Rutter, Department of Geology, The University of Alberta, Edmonton, Canada T6G 2E3 (Telephone: 403-432-3265).

THE AMERICAN GEOMORPHOLOGY FIELD GROUP

The recently organized American Geomorphology Field Group convened its First Conference in Pinedale, Wyoming, September 4-6, 1982. The first and third days of the conference were devoted to an on-site presentation of the results of field studies of fluvial geomorphology. The second day was used for the presentation of formal papers on fluvial geomorphology in the traditional format of scientific meetings. The Second Conference of the American Geomorphology Field Group will be held in the southwest. Those interested in obtaining more information about this meeting should contact Stephen G. Wells, Department of Geology, University of New Mexico, Albuquerque, NM 87131.

MEETINGS AND FIELD TRIPS

The Association of American Geographers

The 79th Anniversary Meeting of the Association of American Geographers will be held in Denver, Colorado, April 24-27, 1983. The Geomorphology Special Interest Group of the Association is planning a program as part of that meeting. Those interested in obtaining information about this meeting should contact Terry Toy, Department of Geography, University of Denver, Denver, CO 80208

Friends of the Pleistocene, South-Central Cell Field Trip

The South-Central Cell of the FOP was organized recently to focus attention on the the Pleistocene of the unglaciated south-central United States. The first field trip of the new Cell will take place March 11-13, 1983, on the Southern High Plains. Vance T. Holiday is the trip organizer. The trip will depart from Lubbock, Tex., and will feature late Quaternary stratigraphy, pedology, paleoclimates, and archaeology. Planned stops include the Lubbock Lake Landmark and area, Plainview site and area, localities along Blackwater Draw (but not the Clovis site), several playas, and the "sand hills" dune field. In addition, a Paleoindian symposium is planned for March 10 at The Museum, Texas Tech University. Eileen Johnson is the symposium organizer. Invited symposium speakers will focus on current research into Paleoindian lifeways and biotic systems. Individuals interested in attending the symposium and/or field trip should contact Eileen Johnson, Musuem Texas Tech University, P.O. Box 4499, Lubbock, TX 79409.

Fourth International Conference on Permafrost

The Fourth International Conference on Permafrost, organized by the National Academy of Sciences and the State of Alaska, will be held July 18-22, 1983, at the University of Alaska in Fairbanks. Field trips will be held in Alaska and northwest Canada both before and after the Conference. The mailing address of the U.S. Organizing Committee is Fourth International Conference on Permafrost, Polar Research Board, National Academy of Sciences, 2101 Constitution Ave., Washington, D.C. 20418 (Phone: 202-334-3479), and that of the Local Organizing Committee is Fourth International Conference on Permafrost, University of Alaska, Fairbanks, AK 99701, U.S.A. (Phone: 907-474-7923 and -7924).

MEETINGS IN 1983

March 3-4
Geological Society of America, South-Central Section
Texas A&M University, College Station, Tex.

March 10
Paleoindian Symposium, Texas Tech University
Lubbock, Tex.

March 11-13
Friends of the Pleistocene Field Trip
South-Central Cell, Texas Tech University
Lubbock, Tex.

March 16-18
Geological Society of America, Southeastern Section
Florida State University
Tallahassee, Fla.

March 23-25
Geological Society of America, Northeastern Section
Concord Hotel
Monticello, N.Y.

April 24-27
Geomorphology Special Interest Group
of the Association of American Geographers
Denver, Colo.

April 28-29
Geological Society of America, North-Central Section
Wisconsin Center
Madison, Wisc.
Includes "symposium on recognition of till facies in the midcontinent region"

May 2-4
Geological Society of America
Cordilleran & Rocky Mountain Joint Section
Salt Palace, Salt Lake City, Utah

July 18-22
Fourth International Conference on Permafrost
University of Alaska
Fairbanks, Alaska

PAST PANELS

1957-59
S. Judson
J. C. Frye
W. D. Thornbury
J. T. Hack
A. N. Strahler
A. D. Howard

1959-61
L. B. Leopold
J. P. Miller
G. M. Richmond
R. P. Sharp
M. G. Wolman
J. M. Zumberge

1961-62
R. F. Black
R. P. Goldthwait
H. E. Wright, Jr.
C. S. Denny
R. L. Nichols
A. N. Strahler

1962-63
E. H. Muller
R. R. Shaffer
C. A. Wahrhaftig
R. F. Black
R. P. Goldthwait
H. E. Wright, Jr.

1963-64
W. C. Bradley
D. R. Crandell
D. F. Eschman
E. H. Muller
P. R. Shaffer
C. A. Wahrhaftig

1964-65
S. A. Schumm
A. N. Strahler
S. E. White
*W. C. Bradley
J. H. Mackin
D. R. Crandell
D. F. Eschman

1965-66
A. L. Bloom
J. T. Hack
C. A. Wahrhaftig
S. A. Schumm
A. N. Strahler
S. E. White

1966-67
W. C. Bradley
D. F. Eschman
E. H. Muller
A. L. Bloom
J. T. Hack
C. A. Wahrhaftig

1967-68
J. H. Hartshorn
T. L. Pewe
M. G. Wolman
W. C. Bradley
D. F. Eschman
E. H. Muller

1968-69
D. R. Crandell
S. C. Porter
A. L. Washburn
J. H. Hartshorn
T. L. Pewe
M. G. Wolman

1969-70 (Jan.)
W. C. Bradley
A. L. Bloom
R. L. Shreve
D. R. Crandell
S. C. Porter
A. L. Washburn

1969-70 (Nov.)
P. W. Birkeland
H. W. Borns, Jr.
D. J. Easterbrook
W. C. Bradley
A. L. Bloom
R. L. Shreve

1970-71
P. W. Birkeland
H. W. Borns, Jr.
*D. J. Easterbrook
M. Morisawa
J. H. Hartshorn
R. V. Ruhe
S. E. White

1971-72
J. H. Hartshorn
R. V. Ruhe
S. E. White
R. R. Curry
R. J. Janda
S. C. Porter

1972-73
P. W. Birkeland
L. Clayton
M. Morisawa
R. R. Curry
R. J. Janda
S. C. Porter

1973-74
J. T. Andrews
W. B. Bull
J. H. Hartshorn
P. B. Birkeland
L. Clayton
M. Morisawa

1974-75
J. T. Andrews
W. B. Bull
J. H. Hartshorn
W. H. Johnson
K. L. Pierce
J. W. Hawley

1975-76
W. H. Johnson
K. L. Pierce
J. W. Hawley
P. W. Birkeland
E. H. Muller
S. C. Porter

1976-77
P. W. Birkeland
E. H. Muller
S. C. Porter
J. T. Andrews
V. R. Baker
M. Morisawa

1977-78
J. T. Andrews
V. R. Baker
M. Morisawa
J. B. Benedict
W. R. Farrand
S. E. White

1978-79
J. B. Benedict
W. R. Farrand
S. E. White
J. E. Armstrong
P. W. Birkeland
K. L. Pierce

1979-80
J. E. Armstrong
P. W. Birkeland
K. L. Pierce
G. M. Ashley
R. P. Goldthwait
R. J. Janda

1980-81
G. M. Ashley
R. P. Goldthwait
R. J. Janda
E. B. Evenson
A. F. Schneider
G. I. Smith

1981-82
E. B. Evenson
A. F. Schneider
G. I. Smith
R. F. Black
J. H. Hartshorn
N. W. Rutter

*resigned to accept office

DEADLINE FOR RECEIPT OF NEWSLETTER NEWS

Newsletters will be mailed in early January and again in June. Members wishing to use the newsletter as a means of announcing field trips or meetings, or as a means of communicating with a part or all of the Division membership are urged to provide the necessary information to the Division Secretary by November 20 for inclusion in the January Newsletter and by May 1 for inclusion in the June Newsletter.

THE GEOLOGICAL SOCIETY OF AMERICA
3300 Penrose Place
P.O. Box 9140 · Boulder, Colorado 80301

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