RESULTS OF 1986 DIVISION ELECTION

A total of 1028 ballots were mailed to the Division's voting affiliates for the 1986 election of officers and Panel members, and 321 valid ballots were returned. Division officers and Panel members elected for 1986 are:

Chairman............................Victor R. Baker
First Vice-Chairman..............James C. Knox
Second Vice-Chairman.............Dale F. Ritter
Secretary............................Richard F. Madole

Panel members (1986-88)..........Parker E. Calkin
..................................................William L. Graf

A tie vote for the third Panel member will be resolved at the meeting of the Division Management Board at the Annual Meeting in San Antonio, Texas, as prescribed by the Division Bylaws.

NOMINATIONS FOR THE 1987 PANEL MEMBERS

Clip out and mail this ballot before November 15, 1986, to: Richard F. Madole
U.S. Geological Survey
Box 25046, MS 966
Denver, CO 80225

All members except Division officers, present or retiring Panel members, and Student Associates are eligible for nomination to the Panel. The six names receiving the highest number of nominations will appear on the annual ballot. Each voting affiliate of the Division (member other than Student Associate) may nominate up to three persons.

(1) ........................................
(2) ........................................
(3) ........................................

Name of Nominator

DIVISION FINANCIAL STATEMENT FOR CALENDAR YEAR 1985

Financial condition of the QG&G Division as of December 31, 1985:

QG&G Division Fund
Fund Balance 12/31/84 $1090.89
Dues Income thru 12/31/85 2774.00
Total Division Resources $3864.89

Division Expenses $2104.41
Funds transferred to Mackin Fund 12/31/85 880.24
Total deductions $2984.65
Adjusted Division Fund Balance as of 12/31/85 $880.24

J. Hoover Mackin Appropriated Fund
Fund Balance 12/31/84 $7857.06
Earnings and Contributions $536.56
Division Fund Transfer 880.24
Total Income $1416.80

Grant Awards ($1000.00)

J. Hoover Mackin Fund Balance as of 12/31/85 $8273.86

MACKIN GRANT APPLICATIONS FOR 1987

The deadline for receipt of applications for the Mackin Grant for research in geomorphology or Quaternary geology is February 15, 1987. 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 15, 1987.

Application forms may be obtained from the Division Secretary, Richard F. Madole, U.S. Geological Survey, Box 25046, MS 966, Denver, CO 80225.
Eleven applications for Mackin Grants were received in 1986, four from M.S. degree candidates and seven from Ph.D. candidates. The scoring of applications from Ph.D. candidates resulted in a tie. The tie was resolved by dividing the grant money equally between the two applicants. Both applicants also are recipients of other GSA funds.

The M.S. degree candidate selected for a Mackin Grant for 1986 is Mark A. Gonzalez, Department of Geography, University of Wisconsin, Madison. Gonzalez will study the "Fluvial geomorphology, geochronology, and paleoclimatology of Paddock Creek, Little Missouri Badlands, southwestern North Dakota" under the supervision of Professor James C. Knox.

The two Ph.D. candidates selected to share a Mackin Grant are Dorothy I. Sack, Department of Geography, University of Utah, Salt Lake City, and Christopher M. Menges, Department of Geology, University of New Mexico, Albuquerque. Sack will study the "Geomorphology of alluvial fans in the Bonneville Basin, Utah: modeling alluvial fan activity" under the supervision of Professor Donald R. Currey. Menges' study will involve "Systematic and qualitative analyses of the landforms of a mountain front within a basin and range landscape in the northern Rio Grande rift near Taos, north-central New Mexico" under the supervision of Professor Stephen G. Wells.

1986 MACKIN GRANT COMMITTEE

Applications for Mackin Grants are evaluated by a committee of seven composed of the four members of the Management Board and three At-Large members. The three At-Large Committee members are appointed by the Division Chairman and serve for one year.

The At-Large Committee members for 1986 were:

John J. Clague
Nicholas Eyles
John W. Whitney

On behalf of the Division, I want to thank these three individuals for their good work and their willingness to serve.

RECIPIENTS OF THE MACKIN GRANT 1974-1985

1974 -- Louis D. Carter, University of Southern California, "Quaternary geology in Baja, California".
1975 -- Phillip Davis, University of Colorado, "Cirque glacier fluctuations and lacustrine chronologies".
1976 -- Award date changed.
1977 -- Daniel R. Muhs, University of Colorado, "Marine terraces-soil development, San Clemente Island, California".
1978 -- Lisa Osterman, University of Colorado, "Quaternary geology of Froshbayer Bay, Baffin Island".
1979 -- Donna Marron, University of California, Berkeley, "Slope processes in Redwood National Park".
1980 -- Lucy L. Foley, Western Washington University, "Loess and paleosol stratigraphy in eastern Washington".
1980 -- Susan L. Gawarecki, Lehig University, "Origin of the Railroad Ridge diamicton".
1981 -- Mary L. Gillam, University of Colorado, "Age and climate effects on soil development, Colorado and New Mexico".
1981 -- Julie Brigham, University of Colorado, "Chronology of Pleistocene marine deposits in coastal Alaska".

1982 -- Thomas F. Bullard, University of New Mexico, "Quaternary geomorphic evolution of a tributary to the Chaco River, northwestern New Mexico".
1982 -- J. Steven Kite, University of Wisconsin, "Late-glacial and Holocene alluvial chronology, St. Johns drainage basin, northern Maine and southern New Brunswick and Quebec".
1983 -- Jonathan M. Harbor, University of Colorado, "Chronology of Holocene events, geomorphic response, and eolian influx in alpine lakes in the Front Range, Colorado".
1983 -- David S. Shafer, University of Tennessee, "Quaternary climatic change, landscape evolution, and paleoecologic history, southern Appalachians, western North Carolina".
1983 -- Carolyn H. Eyles, University of Toronto, "Scarborough Bluffs, Lake Ontario basin, lithofacies codes and the model of diamict deposition below floating ice".
1984 -- Jim E. O'Connor, University of Arizona, "Paleohydrology and hydraulics as interpreted from geologic evidence: Boulder Creek, Utah".
1984 -- Leonard H. Thorleifson, University of Colorado, "The Quaternary stratigraphy of the Hudson Bay lowlands".
1985 -- Karin A. Hoover, University of Washington, "The relation of fluvial processes to facies: the Holocene stratigraphy and sedimentology of the Wells Reservoir area, eastern Washington".
1985 -- Peter D. Lea, University of Colorado, "Late-Quaternary stratigraphy and paleoenvironments of the Nushagak region, southwestern Alaska".

Gladys W. Cole Memorial Research Award for 1986

The Management Board of the Q&G Division evaluates applications received for the Gladys W. Cole Memorial Award. Two applications were received in 1986 and that of Peter W. Birkeland, University of Colorado, was selected for the Cole Award. Professor Birkeland will study the development of calcic soils on slopes of known age in a semiarid environment and the potential for using development of calcic soils for dating geologic hazards.

COLE MEMORIAL RESEARCH AWARD APPLICATIONS FOR 1987

The Gladys W. Cole Memorial Research Award is for investigations 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 30 and 65 years old who has published one or more significant papers in geomorphology. Funds cannot be used for work already accomplished, but recipients of a previous award may reapply if additional support is needed to complete their work. The minimum amount of the award has been increased to $2,100. Application forms for the Cole Award may be obtained from the Research Grants Administrator, The Geological Society of America, P.O. Box 9140, Boulder, CO 80301; Phone (303) 447-2020. Applications must be postmarked by February 15, 1987.

First Distinguished Career Award to Be Made in 1986

The Distinguished Career Award was established in 1985 to recognize Quaternary geologists and geomorphologists who have demonstrated excellence in their contributions to science. Dr. Richard P. Goldthwait is the first recipient of the award, which will be presented at the Division Luncheon at the Annual Meeting of the Geological Society of America in San Antonio, Texas. The luncheon will be held on Wednesday, November 12, at 12:00 p.m. in the Salon del Ray Central of the Hilton Hotel. The Quaternary Geology and Geomorphology Division of the Geological Society of America is pleased to recognize the continuing contributions of Richard P.
Goldthwait to the field of Quaternary geology by presenting him the first distinguished career award.

After receiving degrees at Dartmouth and Harvard and after a short time as a materials engineer with the U.S. Air Force, Goldthwait spent most of his professional career at The Ohio State University in Columbus. While there he was Professor of Geology, Chairman of the Department of Geology and Mineralogy, Acting Dean of the College of Arts and Sciences, and the first Director of the Institute of Polar Studies. He has received numerous awards recognizing his work in Quaternary geology, and particularly glacial geology, and has been active in many professional organizations.

Dr. Goldthwait has, since 1935, contributed significantly to our knowledge of glaciers and glacial deposits and has greatly influenced the direction of research in the field. In 1936 he published the results of the first successful seismic sounding through glacier ice. Since that time, this method, with numerous enhancements, has been used by others to determine ice thickness and the internal characteristics of glaciers.

Dr. Goldthwait has also been influential in the development of concepts of deglaciation of northern New England throughout his professional career. One of his major contributions in this regard has been the application of studies of modern glacier processes to the understanding of deglaciation. At a time when most glacial geomorphologists depended on deductive reasoning to interpret glacial landforms, Richard Goldthwait studied glacier processes in Greenland, Baffin Island, Alaska, New Zealand, and the Antarctic to better understand the development of Pleistocene landforms and deposits. His influential role in forming the Institute of Polar Studies at the Ohio State University in 1960 was a catalyst for greatly increasing the scope of polar research. His role in the development of a glaciology program in New Zealand in the late 1950's has had a similar effect on that country.

Richard Goldthwait has also had a major impact on the development of ideas concerning Quaternary history of the Midwest. He was among the first to use 14C dates in the development of the time stratigraphy of glacial deposits in Ohio. His work during the 1950's and 1960's with Forsyth, Drennanis, and others still stands as a major accomplishment.

Dr. Goldthwait has always been an active member of the Friends of the Pleistocene, and he is also a friend of many former students and colleagues throughout the world. He continues to publish and be active in the field, and recently led an INQUA field trip in Glacier Bay, Alaska.

The Quaternary Geology and Geomorphology Division is proud to recognize the achievements of Richard P. Goldthwait. Friends and former students of Dr. Goldthwait are urged to attend the luncheon and (or) plan to be present during presentation of the award.

KIRK BRYAN AWARD FOR 1986

Eleven publications were considered for the Kirk Bryan Award for 1986. The winning publication is that by Ronald I. Dorn and Theodore M. Oberlander, 1982, Rock varnish: Progress in Physical Geography, v. 6, no. 3, p. 317-367.

Ronald I. Dorn and Theodore M. Oberlander are being recognized for their work on rock varnish. They are responsible for some remarkable developments in the use of rock varnish as an absolute dating tool and as a recorder of environmental (climatic) change. In a series of papers that includes the award-winning paper, they have been the first to culture rock-varnish bacteria in the laboratory; they have developed two new rock-varnish dating techniques: radiocarbon dating of organics extracted from rock varnish and cation-ratio dating; and they have developed three new methods for using rock varnish as indicators of fluctuations in climate that, respectively, utilize stable carbon isotopes, micromorphology of dust layers in rock varnish, and microchemical laminations in rock-varnish layers.

NOMINATIONS FOR THE KIRK BRYAN AWARD FOR 1987

Nominations for the Kirk Bryan Award for 1987 will be accepted until December 1, 1986. To nominate a paper for the Kirk Bryan Award simply identify the paper and provide a statement about its significance. Send nominations to the Division Secretary, Richard F. Madole, U.S. Geological Survey, Box 25046, MS 366, Denver, CO 80225. The Kirk Bryan Award is for a specific work published within the past 5 years. The work may be by a single author or several authors. Note that the deadline for submitting nominations was changed in 1985. Previously, it was February 1.

ACKNOWLEDGMENTS TO PANEL MEMBERS RETIRING IN 1986

As Division Secretary and Chairman of the Panel, I want to thank, on behalf of the Division, those Panel members whose terms expire in 1986 for a job well done:

Steven M. Colman
John E. Costa
Margaret J. Guccione

DEADLINE FOR RECEIPT OF NEWSLETTER NEWS

Newsletters are mailed in March and September of each year. Members wishing to use the Newsletter as a means of communicating with the Division membership must provide the information to the Division Secretary by January 15 for inclusion in the March Newsletter and by July 20 for inclusion in the September Newsletter.

DIVISION-SPONSORED SYMPOSIUMS, 1986 ANNUAL MEETING, SAN ANTONIO, TEXAS

The Division will sponsor a symposium entitled "Quaternary evolution of the Mississippi Valley" organized by James C. Knox and others. The Division has also endorsed an AAG-large symposium entitled "Late Cenozoic evolution of stream systems in the Western United States" organized by Peter C. Patton and Thomas W. Gardner.

QUaternary EVOLUTION OF THE MISSISSIPPI VALLEY
Tuesday, November 11, 1986, 1:30 p.m.
Convention Center, River Room

- Introductory Remarks.............................................. 1:30
1 R. C. Anderson: Periglacial Drainage in the Upper Mississippi Valley Region........................................... 1:35
2 D. A. Sundeen: Structural Controls and Age of the Lower Mississippi Valley...................................... 1:55
3 R. W. Baker: Evidence for an Early Pleistocene Minimum Age for the Upper Mississippi Valley......................... 2:15
4 R. S. Lively and R. M. Olsen: Buried Valleys and U/Th Ages in the Upper Mississippi Valley: Minnesota................................................................. 2:35
- Coffee Break................................................................. 3:15
6 J. C. Knox: Evolution of Valleys and Valley Fills in the Driftless Area, Southwestern Wisconsin
3:30
7 E. R. Hajc: Late-Quaternary Alluvial History of the Lower Illinois Valley and Adjacent Middle Mississippi Valley
3:50
8 R. T. Saucier and L. M. Smith: Late-Wisconsinan and Holocene Evolution of the Lower Mississippi Valley
4:10
9 E. H. Grissinger: Valley Fill Sequences in Tributaries of the Lower Mississippi River
4:30
10 J. M. Coleman: Pleistocene and Holocene Sedimentation in Offshore Mississippi Deltaic Environments
4:50 - Open Discussion
5:10

FIELD TRIPS OF INTEREST TO DIVISION MEMBERS, 1986 ANNUAL MEETING, SAN ANTONIO, TEXAS

Premeeting Trips
Quaternary Geology and Geomorphology of the Rolling Plains, Texas Panhandle. Thomas C. Gustavson, Robert W. Baumgardner, Jr., Chris Caran, and Edward Collins, Bureau of Economic Geology, University of Texas, Austin; and Walter Dalquest, Midwestern State University, Wichita Falls. Two and one-half days, Nov. 7-9. Cost: $235, Lubbock to San Antonio; $155 without airfare. Limit: 45 participants.

Archaeological Geology of Classic Paleo-Indian Sites on the Southern High Plains, Texas and New Mexico. Vance T. Holliday, Texas A&M University, College Station; Eileen Johnson, The Museum, Texas Tech University, Lubbock; Vance Haynes, University of Arizona, Tucson; and Glen Evans, Austin. Two and one-half days, Nov. 7-9. Cost: $235, Lubbock to San Antonio; $155 without airfare. Limit: 45 participants.

Post-meeting Trips


For further information, contact Jerry Wermund, Bureau of Economic Geology, University of Texas at Austin, Austin, TX 78713, (512) 471-1534; Weldon Hammond, Division of Earth and Physical Sciences, Geology Program, University of Texas at San Antonio, San Antonio, TX 78289, (512) 691-5448; or Field Trip Coordinator, GSA headquarters.

SHORT COURSES BY DIVISION MEMBERS, 1986 ANNUAL MEETING, SAN ANTONIO, TEXAS

Glacial-Marine Sedimentation
Saturday, November 8, 1:00 to 6:00 p.m., continues 7:30 to 10:00 p.m.; Sunday, November 9, 8:00 a.m. to 5:00 p.m., Hilton

Intended for a broad spectrum of participants ranging from student to professional, this course will present an up-to-date summary of what is known about glacial-marine sedimentation. Emphasis will be on the diverse nature of modern depositional environments and their resulting facies and deposits. Other discussions will analyze the temporal and spatial distribution of glacial-marine sediment in the rock record. The course will also include introductory sections that provide basic information about marine and glacial depositional environments. Hands-on core and seismic profile workshops will enhance the presentation. An informal reception will be held in conjunction with the workshop on Saturday evening.

Faculty: Bruce F. Molnia, Polar Research Board, National Research Council, National Academy of Sciences, and John B. Anderson, Department of Geology, Rice University. Fee includes course manual and Saturday evening reception. Limit: 100. Fee: $100.

Computer Graphics for Geological Applications Saturday, November 8, and Sunday, November 9, 8:00 a.m. to 5:00 p.m., Hewlett-Packard

This course is designed for those familiar with personal computers, for those who have used a mainframe, or for those with a need to use specialized graphic techniques to help solve geologic problems. The objective will be to provide the participant with an understanding of techniques for creating computer graphics to illustrate geologic information.

Faculty: Richard C. Craig, Department of Geology, Kent State University; Harlan P. Foutz, Battelle Memorial Institute, Pacific Northwest Labs; Barry L. Roberts, Department of Geology, Kent State University; and Michael P. Singer, URS Dalton, Cleveland. Computer equipment provided courtesy of Hewlett-Packard. Fee includes course manual, lunch both days and dinner Saturday evening. Limit: 24. Fee: $270.

FOR REGISTRATION INFORMATION CONTACT:
Edna Collis, GSA Course Registrar, GSA Headquarters, P. O. Box 9140, Boulder, Colorado 80301. (303) 447-2020. Fees will be refunded if GSA is notified by October 17. Substitutions may be made at any time. No refunds will be made after the course is completed.

DIVISION COCKTAIL PARTY, 1986 ANNUAL MEETING, SAN ANTONIO, TEXAS

Follow the crowd to the Third Annual Q&G Division Cocktail party to be held Tuesday, November 11, 1986, from 7:30-10:30 p.m. at the Hyatt Regency East No. 2. At least one surprise is planned for this event, so plan to arrive early and share in the fun. The first annual event at Reno was a huge success and that at San Antonio is expected to be the same.
The 1986 Rocky Mountain FOP field trip will be held in the northern part of Yellowstone Park and vicinity. This area is among the most geomorphically active in the Rockies, with exceptional volcanic, glacial, fluvial, and tectonic features dating from the distant past, the recent past, and perhaps the near future!

The trip will begin in Bozeman, Montana, on Saturday, September 6, and follow the Yellowstone River Valley to Yellowstone Park and Lake. Discussions enroute will include the glacial, glaciolfluvial, and tectonic history of the lower Yellowstone (Paradise) Valley and the deglaciation history and ice extent in the northern portion of Yellowstone Park. The second day will include examination of the stratigraphy at Canyon, including interbedded tills and volcanics, and discussion of the evidence for recent rapid volcanotectonic deformation within the caldera. The second night will also be spent at Yellowstone Lake. On Monday, September 8, participants will return to Bozeman via West Yellowstone, with a look at the evidence for pre-Pinedale glaciation of the Yellowstone Plateau and West Yellowstone basin, at the sequence of scarp evolution in gravels, and at the geomorphology of the upper Gallatin River Valley. Trip participants will include Wayne Hamilton, MPS; Steve Personius, Ken Pierce, and Gerry Richmond, USGS; Bill Locke, Grant Meyer, and John Montagne, Montana State University; and Dave Nash, University of Cincinnati.

For registration information, contact Ken Pierce, USGS, Box 25046, MS 913, Denver, CO 80225.

INTERNATIONAL GEOMORPHOLOGY: UPDATE

Since the last OGEO Division Newsletter, there have been three major developments of relevance to international geomorphology: (1) the distribution of the first International Geomorphology Newsletter, (2) the preparation of the first information about the Second International Conference on Geomorphology, and (3) the initiation of a questionnaire for the establishment of a World Directory of Geomorphologists.

1. The International Geomorphology Newsletter, issued in March 1986, includes the minutes of the three international geomorphology business meetings at the National Meetings (the Plenary Business meeting, and the first Working Committee meeting) held during the FIGOG in Manchester, David Sugden's report on his survey of the ramifications involved in the formation of an international geomorphological organization and lists of the members of the working committee, advisory associates, and corresponding members. The second Newsletter will be distributed this Fall.

2. Second International Conference on Geomorphology, The following information has been supplied about FIGOG by Prof. Dr. Dietrich Barsch, Geographisches Institut, Universität Heidelberg, Im Neuenheimer Feld 340, D-6900 Heidelberg, West Germany, who is Chairman of the Organizing Committee. The main session of the Second Conference, which is entitled Geomorphology and Ecology, will be held in Frankfurt/Main between Sunday, September 3, 1989, and Saturday, September 9. Pre- and post-congress activities (field trips, workshops, symposia, etc.) are already being planned partly together with neighboring countries. Other members of the Organizing Committee are: Professors Doctors Arno Semmel (local organizer), K. Siebert (memorandum publication), Hanna Bremer (proceedings), Dietlef Busche (congress abstracts), Heinz Karrasch (finance), O. Seuffert (excursions), Gerhard Stähle (lecture program).

3. The World Directory of Geomorphologists. One of the charges issued to the Working Committee during the Plenary Session in Manchester was the eventual publication of a Directory of the World's Geomorphologists. If you are interested in being listed in this Directory, please complete the form below and send it to H. J. Walker, Department of Geography, Louisiana State University, Baton Rouge, LA 70803.

WORLD DIRECTORY OF GEOMORPHOLOGISTS

Family Name: ___________________________ Telephone No. ___________________________

Given Names: ___________________________

Address: ________________________________________________________________

Research Interest: ____________________________________________________________

Technique Interest: __________________________________________________________

Area/Region Interest: _________________________________________________________

H. J. Walker
Louisiana State University

NEW BOOK: GLACIATION IN ALASKA--THE GEOLOGIC RECORD


This volume is a compilation of recent studies of late Tertiary and Quaternary glaciation in ten mountainous regions across Alaska. The individual papers illustrate the broad range of research techniques required for an area as large and diverse as Alaska, with its striking contrasts in climate, vegetation, tectonic history, and accessibility.

Each regional synthesis, written by one or more specialists, reviews earlier studies, describes recent developments, and presents a comprehensive account of glacial stratigraphy and chronology. Most papers include complete bibliographies, correlation charts, maps of glacial limits, and tables of radiocarbon dates that were prepared especially for this volume. The glacial records provide the stratigraphic framework within which other studies, such as fault activity, volcanism, formation of placer deposits, early human prehistory, and the palaeoecology of Beringia, can be based.

Contents

Late Cenozoic glaciation of the central Brooks Range: T. D. Hamilton
Glacial history of the Seward Peninsula: D. S. Kaufman and D. M. Hopkins
Glacial geology of the Yukon-Tanana Upland: F. R. Weber

Late Cenozoic glaciation of the northern Menana River valley: R. M. Thorson

Two glacial records from west-central Alaska: J. T. Kline and T. K. Bundtzen

Glaciation of the Alaska Peninsula: R. L. Detterman


Pleistocene glaciation of the upper Cook Inlet basin: H. R. Schmoll and L. A. Yehle

Glacial history of the northeastern Gulf of Alaska: B. F. Molnia

Wisconsin and Holocene glaciation of southeast Alaska: D. H. Mann

Available from Alaska Geological Society, Attention: Barbara Bascle, Box 101288, Anchorage AK 99510

NEW BOOK: QUATERNARY EVOLUTION OF THE GREAT LAKES


CONTENTS

GENERAL

Glacial Lake Agassiz and Its Influence on the Great Lakes: J. T. Teller

LAKE SUPERIOR BASIN

Late Wisconsinan and Holocene History of the Lake Superior Basin: W. R. Farrand and C. W. Drexler

Deglacial Great Lakes Shorelines at Sault Ste. Marie, Ontario: W. R. Cowan

LAKE MICHIGAN BASIN


Lake Level, Uplift, and Outlet Incision, the Nipissing and Algoma Great Lakes: C. E. Larsen

LAKE HURON BASIN


Late Quaternary Holocene Faunal Changes in the Huron Basin: R. B. Miller, P. F. Karrow, and G. L. Mackie

History of Glacial Lake Algonquin in the Haliburton Region, South-Central Ontario: C. A. Kaszczik

Glacial Lake Algonquin and the Fenelon Falls Outlet: P. F. Finamore

Postglacial History of the Mining Basin, Ontario: W. D. Fitzgerald


LAKE ERIE BASIN


Chronology and Nature of the Pleistocene Beaches and Wave-Cut Cliffs and Terraces, Northeastern Ohio: S. M. Totten

Glacial Retreat and Lake Levels, North-Central Lake Erie Basin, Ontario: P. J. Barnett

Postglacial Lake Levels in the Erie Basin: J. P. Goakley and C. F. M. Lewis

LAKE ONTARIO BASIN

Glacial Lakes in the Ontario Basin: E. H. Muller and V. K. Prest


Payment by check or money order may also be made in equivalent U.S. funds. Payment must accompany order. All sales final. Make checks payable to Geological Association of Canada. Mail orders to GAC Publications, Business and Economic Service Ltd., 111 Peter Street, Suite 509, Toronto, Ontario, M5V 2H1, Canada. $36 (Cdn.) - GAC members and $42 (Cdn.) - non-members. Postage and handling $3.00/copy. Orders for 7 or more copies are charged reduced postage and handling rates.

MEETINGS

Archaeological Geology: Environmental Siting and Material Usage, December 7-12, 1986, Saint Simons Island, Georgia. Information: Charles J. Vitaliani, Dept. Geology, Indiana University, 1005 East Tenth Street, Bloomington, IN 47405; (812) 335-1407.

The Fifth International Conference on Permafrost, June 1988, Trondheim, Norway. Theme: Cold regions science and engineering.


Coastal Sediments '87, May 12-14, 1987, New Orleans, Louisiana. Information: Nicholas C. Kraus, USAE Waterways Experiment Station, Coastal Engineering Research Center, P. O. Box 631, Attn: WESCR-P, Vicksburg, MS 35180-0631.


RECIPIENTS OF THE KIRK BRYAN AWARD

1958 Luna B. Leopold and Thomas J. Maddock, Jr. (U.S. Geological Survey)


1959 Jack L. Hough (University of Illinois)


1960 John F. Nye (University of Bristol)


1961 John T. Hack (U.S. Geological Survey)


1962 Anders Rapp (University of Upsala)


1963 Arther H. Lachenbruch (U.S. Geological Survey)

1964  Robert P. Sharp (California Institute of Technology)  

1965  Gerald M. Richmond (U.S. Geological Survey)  

1966  Charles S. Denny (U.S. Geological Survey)  

1967  Clyde A. Wahrhaftig (University of California at Berkeley)  

1968  David M. Hopkins (U.S. Geological Survey)  

1969  Ronald L. Shreve (University of California-Los Angeles)  

1970  Harold E. Malde (U.S. Geological Survey)  

1971  A. Lincoln Washburn (University of Washington)  

1972  Dwight R. Crandall (U.S. Geological Survey)  

1973  John T. Andrews (University of Colorado)  

1974  Robert V. Ruhe (Indiana University)  

1975  James B. Benedict (Colorado State University)  

1976  Geoffrey G. Boulton (University of East Anglia)  

1977  Michael A. Church (University of British Columbia)  

1978  Richard L. Hay (University of California at Berkeley)  

1979  Stanley A. Schumm (Colorado State University)  


1981  J. Ross Mackay (University of British Columbia)  

1982  Kenneth L. Pierce (U.S. Geological Survey)  

1983  Leland H. Gilé, John W. Newby, Robert R. Grossman  

1984  Steven M. Colman (U.S. Geological Survey)  

1985  No award given.

1986  Ronald L. Born and Theodore M. Quirlander  

DIVISION CHAIRMEN

1986  G. M. Ashley  
1985  D. F. Eschman  
1984  D. J. Easterbrook  
1983  J. T. Andrews  
1982  T. L. Peewee  
1981  M. Morisawa  
1980  S. A. Schumm  
1979  W. B. Bull  
1978  A. L. Bloom  
1977  W. C. Bradley  
1976  L. H. Lattman  
1975  R. L. Nichols  
1974  D. R. Crandell  
1973  H. E. Malde  
1972  R. F. Flint  
1971  R. P. Goldthwait  
1970  A. D. Howard  
1969  L. D. Leopold  
1968  R. P. Goldthwait  
1967  E. H. Wright, Jr.  
1966  L. H. Nobles  
1965  M. G. Richards  
1964  A. L. Washburn  
1963  L. B. Leopold  
1962  J. G. Fyles  
1961  J. T. Hack  
1960  C. S. Denny  
1959  G. W. White  
1958  G. W. White  
1957  J. H. Mackin  
1956  J. H. Mackin  
1955  E. Blackwelder

DIVISION SECRETARIES

1980-1981  D. J. Easterbrook  
1979-1979  S. E. White  
1978-1978  L. H. Nobles  
1977-1977  D. J. Easterbrook  
1976-1976  S. E. White  
1975-1975  L. H. Nobles  
1974-1974  R. P. Goldthwait

PAST PANELS

1957-59  S. Judson  
1959-61  J. C. Frye  
1959-61  W. D. Thornbur  
1959-61  J. T. Hack  
1959-61  A. N. Strahler  
1959-61  A. D. Howard  
1961-62  S. Leopold  
1961-62  J. P. Miller  
1961-62  G. M. Richmond  
1961-62  R. P. Sharp  
1961-62  M. G. Wolman  
1961-62  J. M. Zumberge  
1962-63  R. F. Black  
1962-63  H. E. Wright, Jr.  
1962-63  C. A. Wahrhaftig  
1962-63  C. A. Wahrhaftig  
1962-63  R. R. Shaffer  
1962-63  R. R. Shaffer  
1962-63  D. F. Eschman  
1962-63  R. F. Black  
1962-63  G. P. Goldthwait  
1962-63  H. E. Wright, Jr.  
1962-63  C. A. Wahrhaftig
<table>
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<th>Year</th>
<th>Director/Chairman</th>
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*resigned to accept office

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