# Meetings

## Friends of the Pleistocene

The 23rd field conference of the eastern division of the Friends of the Pleistocene was held in western New York on 20-22 May. Approximately 125 geomorphologists, glacial geologists, ground-water geologists, pedologists, and palynologists from Ontario, Quebec, the New England and Middle Atlantic states, Ohio, Indiana, Michigan, South Carolina, and Louisiana participated in this sixth reunion to be held in New York state. Leader of the conference was Ernest H. Muller of Svracuse University, whose investigations in Chau-Cattaraugus, and adjacent tauqua. counties have been sponsored by the New York State Museum and Science Service since 1956. Clair Brown of Louisiana State University, William S. Benninghoff of the University of Michigan, and Edward Ketchledge of the New York State College of Forestry at Syracuse University contributed paleobotanical data.

The group gathered at the Dunkirk Conference Grounds, Dunkirk, N.Y., on 20 May. The next day they traveled by automobile caravan southeast from Dunkirk through Gowanda and Otto to Olean. Leaving the Erie lake plain in the morning, the convoy traversed progressively older terrain from the Warren and Whittlesey strands, across late Cary moraines of the plateau margin, to early Wisconsin features of the Olean drift border. The second day's travel was westward from Olean to Salamanca along the drift border northeast of the Salamanca re-entrant.

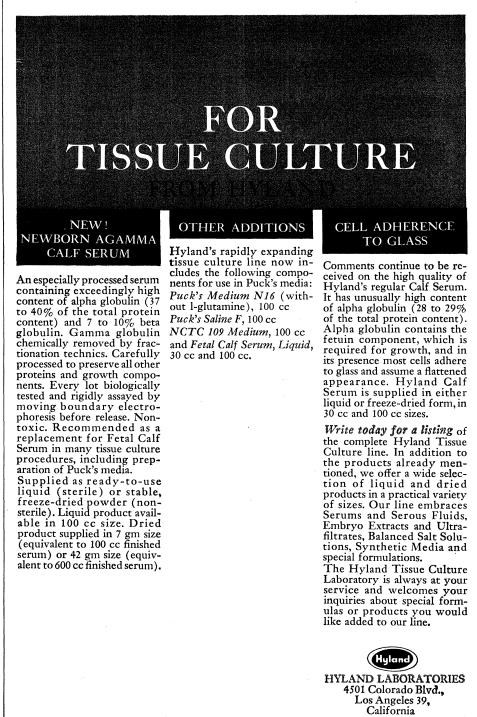
Much of the first day was devoted to problems of glacial stratigraphy. Applicability of mechanical analysis as a criterion for till correlation was discussed at the first stop, on the outermost of the late Cary moraines southwest of Dayton. This moraine is composed of Hiram till and tentatively correlated with the Defiance moraine of Ohio and northwestern Pennsylvania. Eastward in New York the matrices of correlative upland and valley bottom till samples may differ more than the tills of contrasting moraines, and the criterion so far is not applicable. The question of how to distinguish between clay derived from comminution of shale and that from assimilation of lake sediments was discussed, without satisfactory conclusion.

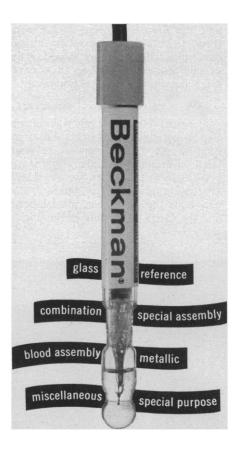
At the Gowanda high bluff and Gowanda Hospital sites, four very similar tills are separated by lake silts. Discussion centered around criteria for evaluating the deglaciation represented by each set of nonglacial deposits of an oscillatory ice margin fronting on deep pro-glacial lake waters.

11 NOVEMBER 1960

Deposits of post-Sangamon, pre-Farmdale age were studied at the Gowanda Hospital site and at the classic Otto site described previously by Mac-Clintock and Apfel. At Gowanda a distinctive pink silt till, similar in color to till of the Ontario lake plain but unlike anything else in the immediate vicinity, underlies crumpled and deformed flood-plain deposits containing sparse invertebrate tests, Picea and Pinus pollen, and wood dated as older than 38,000 years (sample W-866, U.S. Geological Survey). At Otto, more abundant organic remains dated as older than 52,000 years (sample Gro 2565, Groningen Laboratory) represent the southern aspect of the boreal forest and are suggestive of climatic conditions slightly more rigorous than present conditions rather than of the mild conditions of the Sangamon to which they had previously been assigned.

Considerable attention was devoted also to periglacial and drift border conditions. At The Narrows, the postulated divergence of the Binghamton and Olean drift borders was considered. Discussion arose as to whether stone nets near the Wisconsin glacial border and the Olean Rock City in the unglaci-





# the finest pH electrodes for every purpose

And Beckman, pioneer and leader in pH instrumentation since 1935, offers you the widest selection in each standard type of electrode. Whether you need a glass, reference, combination, blood assembly, metallic, special assembly or miscellaneous type of electrode, you can select the one most suitable for your specific application. Order Beckman electrodes by catalog number or consult your Beckman authorized laboratory apparatus dealer for expert advice. In addition to these basic types, special purpose electrodes may be obtained to solve new or unusual pH and/or specific ion problems. For list of dealers and complete electrode catalog write for Data File 38-46-01.



ated Salamanca re-entrant represent periglacial conditions or are in process of active development under the present environment. The upland peneplain was introduced as evidence of the relative ineffectiveness of glacial scour on summits near the limits of glaciation. ERNEST H. MULLER

Department of Geology, Syracuse University, Syracuse, New York

### Forthcoming Events

#### November

29-30. Air Research and Development Command, Science and Engineering Symp., 7th annual, Boston, Mass. (Office of information, Headquarters, ARDC (Attention: RDEP), Andrews AFB, Washington 25)

30-2. Steels in Reactor Pressure Circuits, symp., London, England. (Secretary, Iron and Steel Inst., 4 Grosvenor Gardens, London, S.W.1)

#### December

1-16. Commission for Climatology, 3rd session, London, England. (World Meteorological Organization, Campagne Rigot, 1, avenue de la Paix, Geneva, Switzerland)

2-5. Central American Medical Conf., 8th, Panama City. (A. Bissot, Departamento de Saud Publica, Ministerio de Trabajo, Prevision Social y Salud Publica, Panama)

3-6. Visual Communications, 4th annual intern. cong., Chicago, Ill. (Visual Communications Cong., 10600 Puritan Ave., Detroit 38, Mich.)

3-8. American Acad. of Dermatology and Syphilology, Chicago, Ill. (R. R. Kierland, First National Bank Building, Rochester, Minn.)

4-6. Spectroscopy, annual southern seminar, Gainesville, Va. (Annual Seminar on Spectroscopy, Univ. of Florida, Gainesville)

4-7. American Inst. of Chemical Engineers, annual, Washington, D.C. (F. J. Van Antwerpen, AICE, 25 W. 45 St., New York 36)

4-9. Radiological Soc. of North America, Cincinnati, Ohio. (D. S. Childs, 713 E. Genesee St., Syracuse 2, N.Y.)

5-7. American Soc. of Agricultural Engineers, winter, Memphis, Tenn. (J. L. Butt, 420 Main St., St. Joseph, Mich.)

5-7. Electronic Industries Assoc., 3rd conf. on maintainability of electronic equipment, San Antonio, Tex. (E. B. Harwood, Office of the Secretary of Defense, Room 3D1018, Pentagon, Washington 25)

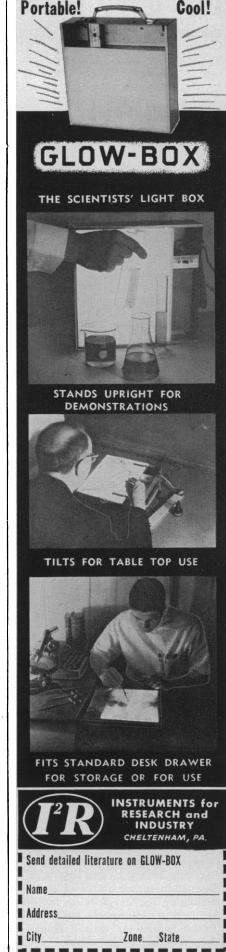
5-8. American Rocket Soc., 15th annual, Washington, D.C. (R. L. Hohl, ARS, 500 Fifth Ave., New York 36)

5-8. American Soc. of Agronomy, annual, Chicago, Ill. (L. G. Monthey, ASA, 2702 Monroe St., Madison 5, Wis.)

7-13. American Acad. of Optometry, San Francisco, Calif. (C. C. Koch, 1506-08 Foshay Tower, Minneapolis 2, Minn.)

9-10. The Myocardium—Its Biochemistry and Biophysics, New York, N.Y. (A. P. Fishman, New York Heart Assoc., 10 Columbus Circle, New York 19)

9-11. American Psychoanalytic Assoc., New York, N.Y. (D. Beres, 151 Central Park West, New York 23)



SCIENCE, VOL. 132