

Scientific Meetings

Recording Animal Sounds

The traditional methods of publication in biology are poorly suited for communicating information about animal sounds, because these sounds cannot be accurately represented by phonetic or musical notations. Communication among workers studying sound production, reception, and reactions of animals is possible, however, through exchange of recordings, when this is attempted. These arise from the lack of clear-cut criteria of fidelity for the recordings, the difficulty of locating recordings of interest, and the necessity of preparing copies for equipment with characteristics different from those of the original recording devices.

To discuss means to solve some of these problems and thus to facilitate international exchange of information on animal sounds, a conference was held at Pennsylvania State University, 16-19 Apr. 1956, with Hubert and Mable Frings as cochairmen. Forty biologists from England, France, Germany, and the United States participated. The National Science Foundation of the United States provided financial support.

The first day of the conference was devoted to lectures by R. J. Pumphrey (England), D. R. Griffin (United States), F. P. Möhres (Germany) and R. G. Busnel (France) on the use of recorded animal sounds in biological research. One evening was devoted to informal presentations of recorded sounds of whales, fish, insects, amphibians, and birds by seven of the participants. The rest of the time was occupied with informal discussions.

The participants agreed to form an organization, the International Committee on Biological Acoustics, the objective of which is to foster exchange of information among workers studying acoustic behavior of animals. An executive council, consisting of Busnel, Möhres, Pumphrey, H. W. Frings, D. R. Griffin, W. E. Schevill (U.S.), and T. C. Schneirla (U.S.) was elected, with Busnel, Schneirla, and Frings as the secretariat of the council.

In support of its objectives, the committee plans to set up two organizations: the International Collection of Animal

Phonography and the International Library of Biological Acoustics.

The curator of the collection will have three major duties: (i) to receive and catalog samples of recorded animal sounds illustrating published articles, (ii) to publish lists of recordings of animal sounds which investigators agree to make available for study by others, and (iii) to prepare copies of recordings in proper media for exchange between laboratories. P. P. Kellogg (Cornell University) suggested that the Library of Natural Sounds at Cornell University might act as a depository for the short, illustrative recorded samples until the international collection could be set up. The appointment of a curator for the collection and activation of the publishing and copying activities awaits administrative and financial arrangements for the curator's office.

To make the recorded sounds most valuable when they are exchanged, it is necessary that the recipients have exact information about the conditions, both physical and biological, under which the recordings are made. The secretariat of the committee was delegated to prepare a list of informational items to be deposited with recordings. After much discussion of technical problems in recording by the conferees, a tentative list was drawn up.

The library will have two major functions: (i) the preparation and distribution of lists of current literature in the field and (ii) the encouragement of publication of indexed bibliographies on acoustics of special animal groups. To facilitate these activities, all biologists are requested to send two reprints of each of their articles in this field to Mable Frings, secretary to the executive council, at Pennsylvania State University.

The committee is anxious to have broad representation and welcomes inquiries about membership from interested biologists. These should be addressed to the chairman, H. Frings, at Pennsylvania State University, University Park, Pa., U.S.A. There are no dues, the only obligation being to support the activities of the group.

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*Pennsylvania State University,
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Meeting Notes

■ A new organization, the Pavlovian Society for the Experimental Investigation of Behavior, held its first meeting last month at Cornell University. The society has about 35 members, active investigators of animal and human behavior. They emphasize the methodology developed by Ivan Petrovich Pavlov, Russian scientist who was known especially for his studies of conditioned reflexes.

The members plan to meet each year at some member's behavior laboratory to observe and discuss technical methods and results. Their host at Cornell was Howard S. Liddell, director of the university's Behavior Farm.

The society grew out of a meeting a year ago marking the 25th anniversary of the Pavlovian Laboratory of the Henry Phipps Psychiatric Clinic at Johns Hopkins University. W. Horsley Gantt, chairman of the Johns Hopkins laboratory, is chairman of the society's steering committee. Other members are Liddell, who is chairman elect; Edward J. Kempf of Wading River, N.Y.; David McK. Rioch of the Division of Neuropsychiatry at the Walter Reed Army Medical Center in Washington, D.C.; and William G. Reese of the psychiatry department, the University of Arkansas School of Medicine.

■ This year is the centenary of the death of Amedeo Avogadro, the Italian chemist and physicist who discovered one of the fundamental laws concerning the behavior of gases. The Avogadro number, that is, the number of atoms per gram atom of a substance, is one of the most important natural constants.

To mark the occasion the Italian National Accademia dei XL, of which Amedeo Avogadro was a member, organized a commemorative meeting that took place on 6 June in Rome. Appreciations of Avogadro's work were given by the mathematician, Prof. Francesco Severi, president of the Accademia dei XL; Sir Cyril Hinshelwood of Oxford University, president of the Royal Society; Prof. Linus Pauling of the California Institute of Technology; and Prof. G. B. Bonino of the University of Bologna.

■ The seventh Alaskan Science Conference will be held in Juneau, 27-30 Sept. 1956. The meeting is sponsored by the AAAS Alaska Division, the Alaska Section of the American Society of Civil Engineers, and the Alaska Chapter of the Society of American Foresters. Abstracts, which should not exceed 250 words, must be submitted to the appropriate section chairman by 15 July.

These chairmen are as follows: agriculture, Mr. James J. Hurley, Alaska Rural Rehabilitation Administration, Palmer, Alaska; anthropology, Mrs.

Rosemary Allen Nagel, Alaska Historical Library and Museum, Box 2051, Juneau, Alaska; biology, Mr. Urban "Pete" Nelson, U.S. Fish and Wildlife Service, Juneau, Alaska; engineering, Dr. E. F. Rice, Department of Civil Engineering, University of Alaska, College, Alaska; fisheries, Mr. Walter Kirkness, Senior Biologist, Alaska Department of Fisheries, Juneau, Alaska; forestry, Mr. A. P. Caporas, Alaskan Forest Research Center, Forest Service, Juneau, Alaska; geology and geography, Mr. Ernest H. Lathram, Alaskan Geology Branch, U.S. Geological Survey, 4 Homewood Place, Menlo Park, California; geophysics, Dr. Masahisa Sugiura and Dr. C. T. Elvey, Geophysical Institute, University of Alaska, College, Alaska; medicine and public health, Dr. Thomas R. A. Davis, Arctic Aeromedical Laboratory, Ladd Air Force Base, Fairbanks, Alaska; social sciences, Mr. Don M. Dafoe, Territorial Commissioner of Education, Alaska Territorial Building, Juneau, Alaska.

■ A Conference on Scientific and Technical Writing will be held 20-24 Aug. in Philadelphia by the University of Pennsylvania's Institute for Cooperative Research. Open to scientists, engineers, editors, writers, and administrators, the conference will provide advanced study and experience-sharing in the art of making technical literature readable. The fundamental problems involved in the communication of technical information will be analyzed, and current systems for handling these problems will be evaluated.

Conference chairman is Harry F. Arader, the university's industrial liaison officer for research and a lecturer in its Moore School of Electrical Engineering. For information and applications, write to Dr. Arader at 3400 Walnut St., Philadelphia 4, Pa.

■ The Committee on Educational Matters of the American Physiological Society will sponsor a second Workshop on the Teaching of Undergraduate Physiology this summer at the University of Wisconsin from 13 to 24 Aug. There will be about 30 participants, including several discussion leaders selected from the Midwest. The informal discussions will concern approaches to subject matter, recent advances, worthwhile experiments (with demonstrations), and general educational problems.

Support from the National Science Foundation will make it possible to reimburse the participants for transportation to and from Madison, and to provide their board and lodging without cost to them while they are on the campus. The director of the 1956 Workshop is Dr. R. R. Ronkin, Department of Biological Sciences, University of Delaware, Newark.

■ The University of Michigan has announced that its seventh annual summer biological symposium, *Modern Approaches to Systematic Biology*, will take place 9-20 July. Participants include Alfred A. Emerson of the University of Chicago, R. D. Gibbs of McGill University, Hampton L. Carson of Washington University and David D. Keck of the New York Botanical Gardens. The meeting is open to all who wish to attend.

■ The first Pan-American Cancer Cytology Congress will be held in Miami, Fla., 25-29 Apr. 1957. Those who wish to deliver a paper should submit the title and a 100-word summary to the secretary, Dr. George Gey, Department of Surgery, Johns Hopkins Hospital, 601 N. Broadway, Baltimore 5, Md. Preference will be given to early applicants.

Two \$1000 Wien awards, one for 1956 and one for 1957, will be presented at the conclusion of the congress to the two scientists whose papers represent outstanding research in cancer cytology. The Wien award was established in 1953 by Leonard Wien, former president of the Cancer Institute at Miami, Fla. The award committee is headed by E. V. Cowdry. For information about the congress, write to Mrs. Elizabeth Maselli, Box 633, Miami 34, Fla.

■ The 11th annual Calorimetry Conference will be held at Johns Hopkins University, 14-15 Sept. The program will cover theoretical aspects of thermal transitions and the description of recent calorimetric measurements and apparatus used over a range of temperatures from below 1°K to about 750°K. Papers will be presented on automatic and high-precision calorimetry, microcalorimetry, thermometry, and so forth.

The chairman for the meeting will be Edgar F. Westrum, Jr., of the University of Michigan; the program chairman is Henry A. Boorse of the Pupin Physics Laboratories, Columbia University. Correspondence about the conference should be addressed to the latter.

■ The 26th annual meeting of the Biological Photographers Association, Inc., will be held in Rochester, N.Y., 27-31 Aug. This is the first 5-day meeting in the group's history. One of the features of the meeting will be an exhibit of books written or illustrated by members.

Society Elections

■ Minnesota Academy of Science: pres., Edward J. Baldes, Mayo Clinic; v. pres., Harold T. Peters, State Teachers College; sec.-treas., Blanchard O. Krogstad, University of Minnesota, Duluth. The representative to the AAAS Council is Shirley P. Miller.

■ American Board of Clinical Chemistry: pres., Marschelle H. Power, Mayo Clinic; v. pres., Warren M. Sperry, New York State Psychiatric Institute; sec.-treas., William A. Wolff, Bowman Gray School of Medicine.

■ Alabama Academy of Science: pres., J. Allen Tower, Birmingham-Southern College; pres.-elect, Howard Carr, Alabama Polytechnic Institute; sec., Herbert A. McCullough, Howard College, Birmingham; treas., Locke White, Southern Research Institute. The representative to the AAAS Council is Patrick H. Yancey.

Forthcoming Events

July

16-17. Symposium on Synthetic Polymer Chemistry, Notre Dame, Ind. (G. F. D'Alelio, Dept. of Chemistry, Univ. of Notre Dame, Notre Dame.)

16-21. French Assoc. for the Advancement of Science, Dijon, France. (Mlle. Henri-Martin, Secretary, 28, rue Serpente, Paris 6°.)

16-21. International Organization for Standardization, Geneva, Switzerland. (IOS, 39, route de Malagnou, Geneva.)

17-26. International Soc. of Photogrammetry, 8th cong., Stockholm, Sweden. (P. O. Fagerholm, Bragevägen 8, Stockholm.)

18-20. Soc. for the Study of Development and Growth, annual, Providence, R.I. (M. V. Edds, Jr., Brown Univ., Providence 12.)

22-27. International Cong. of Pediatrics, 8th, Copenhagen, Denmark. (Prof. Franconi, Kinderspital, Steinwiesstrasse 75, Zürich 32, Switzerland.)

22-28. International Cong. on Housing and Town Planning, Vienna, Austria. (H. van der Weijde, International Federation for Housing and Town Planning, Paleisstraat 5, The Hague, Netherlands.)

22-28. International Cong. of Radiology, 8th, Mexico, D.F., Mexico. (J. Noriega, Tepic 126, 2° piso, Mexico, D.F.)

23-26. International Cong. of Developmental Biology, 1st, Providence, R.I. (J. W. Wilson, Dept. of Biology, Brown Univ., Providence.)

25-27. Conf. on Solar-Weather Relationships sponsored by American Meteorological Soc., Boulder, Colo. (K. C. Spengler, 3 Joy St., Boston 8, Mass.)

26-28. International Conf. on Biochemical Problems of Lipids, 3rd, Brussels, Belgium. (R. Ruyssen, St. Jansvest 12, Univ. of Ghent, Ghent, Belgium.)

27-31. Symposium on Cytodifferentiation (invitational), Providence, R.I. (J. W. Wilson, Dept. of Biology, Brown Univ., Providence.)

27-7. International Limnology Cong., 13th, Helsinki, Finland. (H. Luther, Snellmansgatan 16 C 36, Helsinki.)

30-31. Oak Ridge Regional Symposium, 9th, Blacksburg, Va. (Information Dept., Oak Ridge Inst. of Nuclear Studies, P.O. Box 117, Oak Ridge, Tenn.)

30-4. International Physiological Cong., 20th, Brussels, Belgium. (J. J. Reuse, Faculté de Médecine, 115 Boulevard de Waterloo, Brussels.)

1-6. International Cong. of Human Genetics, 1st, Copenhagen, Denmark. (Secretariate, 1st ICHG, 14, Tagensvej, Copenhagen, N.)

5-10. International Conf. of Social Work, 8th, Munich, Germany. (J. R. Hoffer, 345 E. 46 St., New York 17.)

6-10. Poultry Science Assoc., annual, Raleigh, N.C. (C. B. Ryan, Dept. of Poultry Husbandry, Texas A & M College, College Station.)

6-1. International Mathematical Symposium on Algebraic Topology and Its Applications, Mexico City, Mexico. (Miss J. Silva, Instituto de Matemáticas, Torre de Ciencias, Ciudad Universitaria, México 20, D.F.)

9-18. International Geographical Cong., 18th, Rio de Janeiro, Brazil. (H. O'R. Sternberg, Centro de Pesquisas de Geografia do Brasil, Faculdade Nacional de Filosofia, Av. Presidente Antonio Carlos 40, Rio de Janeiro.)

10-11. Minnesota Acad. of Science, New London, Minn. (B. O. Krogstad, Univ. of Minnesota, Duluth 5B.)

12-17. World Federation for Mental Health, 9th annual, Berlin, Germany. (Secretariat, 19 Manchester St., London W.1, England.)

15-22. Canadian Teachers' Federation, Fredericton, N.B., Canada. (G. G. Crookery, 444 MacLaren St., Ottawa, Ontario, Canada.)

16-21. Symposium on X-Ray Microscopy and Microradiography, Cambridge,

England. (W. C. Nixon, Cavendish Lab., Cambridge.)

17-25. International Cong. of Entomology, 10th, Montreal, Canada. (J. A. Downes, Div. of Entomology, Science Service Bldg., Ottawa, Ont., Canada.)

19-23. International Cong. on Diseases of the Chest, 4th, Cologne, Germany. (Executive Offices, American College of Chest Physicians, 112 E. Chestnut St., Chicago 11, Ill.)

19-24. International Symposium on Combustion, 6th, New Haven, Conn. (Combustion Symposium Office, Mason Lab., Yale Univ., New Haven 11.)

20-21. Mathematical Assoc. of America, 37th summer, Seattle, Wash. (H. M. Gehman, Univ. of Buffalo, Buffalo 14, N.Y.)

20-21. National Telemetering Conf., Los Angeles, Calif. (R. E. Rawlins, Lockheed Aircraft Corp., Burbank, Calif.)

20-24. Conf. on Scientific and Technical Writing, Philadelphia, Pa. (H. F. Arader, Univ. of Pennsylvania, 3400 Walnut St., Philadelphia 4.)

20-24. Institute of Mathematical Statistics, Seattle, Wash. (G. E. Nicholson, Jr., Dept. of Statistics, Univ. of North Carolina, Chapel Hill.)

20-24. International Cong. of Physical Medicine, 2nd, Copenhagen, Denmark. (S. Clemmesen, Kommune-hospitalet, Copenhagen.)

20-25. American Mathematical Soc., 61st summer, Seattle, Wash. (J. H. Curtiss, AMS, 80 Waterman St., Providence 6, R.I.)

22-29. World Cong. of Sociology, 3rd,

Amsterdam, Netherlands. (T. B. Bottomore, Skepper House, 13 Endsleigh St., London, W.C.1, England.)

26-30. American Inst. of Biological Sciences, Storrs, Conn. (H. T. Cox, 2000 P St., NW, Washington 6.)

The following 23 meetings are being held in conjunction with the AIBS meeting at Storrs, Conn.

26-30. American Bryological Soc. (L. J. Gier, Dept. of Biology, William Jewell College, Liberty, Mo.)

26-30. American Fern Soc., annual. (Mildred E. Faust, 501 University Pl., Syracuse 10, N.Y.)

26-30. American Microscopical Soc. (R. W. Pennak, Dept. of Biology, Univ. of Colorado, Boulder.)

26-30. American Soc. for Horticultural Science, annual. (F. S. Howlett, Ohio Agricultural Experimental Station, Wooster, Ohio.)

26-30. American Soc. of Human Genetics. (E. J. Gardner, Dept. of Zoology, Utah State Agricultural College, Logan.)

26-30. American Soc. of Limnology and Oceanography, annual. (B. H. Ketchum, Woods Hole Oceanographic Institution, Woods Hole, Mass.)

26-30. American Soc. of Parasitologists, annual. (A. C. Walton, Knox College, Galesburg, Ill.)

26-30. American Soc. of Plant Physiologists, annual. (A. W. Galston, Dept. of Botany, Yale Univ., New Haven, Conn.)

26-30. American Soc. of Plant Taxonomists, annual. (R. C. Rollins, Gray Herbarium, Harvard Univ., 22 Divinity Ave., Cambridge 38, Mass.)

26-30. Biometric Soc., ENAR. (A. M. Dutton, Univ. of Rochester, Box 287, Station 3, Rochester 20, N.Y.)

26-30. Botanical Soc. of America, annual. (H. C. Bold, Vanderbilt Univ., Nashville, Tenn.)

26-30. Ecological Soc. of America, annual. (J. F. Reed, Dept. of Botany, Univ. of Wyoming, Laramie.)

26-30. Mycological Soc. of America, annual. (C. J. Alexopoulos, Dept. of Botany, Michigan State Univ., East Lansing.)

26-30. National Assoc. of Biology Teachers. (P. V. Webster, Bryan City Schools, Bryan, Ohio.)

26-30. Nature Conservancy. (G. B. Fell, 4200 22 St., NE, Washington 18.)

26-30. Phycological Soc. of America, annual. (P. C. Silva, Dept. of Botany, Univ. of Illinois, Urbana.)

26-30. Soc. of General Physiologists. (A. M. Shanes, National Inst. of Arthritis and Metabolic Diseases, Bethesda 14, Md.)

26-30. Soc. for Industrial Microbiology, annual. (C. P. Porter, Dept. of Biological Sciences, Purdue Univ., West Lafayette, Ind.)

26-30. Soc. of Protozoologists, annual. (N. D. Levine, College of Veterinary Medicine, Univ. of Illinois, Urbana.)

26-30. Soc. of Systematic Zoology. (R. E. Blackwelder, 3728 Second St. South, Arlington 4, Va.)

27-29. American Soc. of Zoologists, 53rd annual. (R. T. Kempton, Marine-land Research Laboratory, Marineland, Fla.)

27-29. Genetics Soc. of America, an-

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nual. (H. B. Newcombe, Atomic Energy of Canada, Ltd., Chalk River, Ont.)

27-31. American Soc. of Naturalists, annual. (B. Wallace, Biological Lab., Cold Spring Harbor, Long Island, N.Y.)

26-1. International Soc. of Haematology, 6th cong., Boston, Mass. (ISH, New England Medical Center, Harrison Ave. at Bennet St., Boston 11.)

27-31. Biological Photographic Assoc., 26th annual, Rochester, N.Y. (BPA, c/o 343 State St., Rochester 4.)

27-31. Colloquium on Statistical Mechanics of Transport Processes, IUPAP, Brussels, Belgium. (I. Prigogine, 40 Avenue F. D. Roosevelt, Brussels.)

27-31. Infrared Spectroscopy Inst., 7th annual, Nashville, Tenn. (N. Fuson, Dept. of Physics, Fisk Univ., Nashville 8.)

28-2. Colloquium on Semiconductors and Phosphors, IUPAP, Garmisch-Partenkirchen, Germany. (H. Maier-Leibnitz, Walter-von-Dyck-Platz 1, Munich 2, Germany.)

29-5. British Assoc. for the Advancement of Science, annual, Sheffield, England. (Secretary, BAAS, Burlington House, Piccadilly, London, W.1., England.)

29-8. International Soc. of Soil Science, 6th cong., Paris. (F. A. Van Baren, ISSS, Royal Tropical Inst., Mauritskade 63, Amsterdam, Netherlands.)

30-5. American Psychological Assoc., Chicago, Ill. (F. H. Sanford, 1333 16 St., NW, Washington 6.)

30-5. Psychometric Soc., Chicago, Ill. (L. V. Jones, Dept. of Psychology, Univ. of Chicago, Chicago 37.)

September

1-9. International Cong. of Anthropological and Ethnological Sciences, 5th, Philadelphia, Pa. (Secretary, American Organizing Committee, International Cong. of Anthropology, National Acad. of Sciences-National Research Council, 2101 Constitution Ave., Washington 25.)

2-7. Laurentian Hormone Conf., AAAS, Mont Tremblant, Quebec, Canada. (Committee on Arrangements, LHC, 222 Maple Ave., Shrewsbury, Mass.)

4-6. International Assoc. of Milk and Food Sanitarians, annual, Seattle, Wash. (H. L. Thomasson, IAMFS, Box 437, Shelbyville, Ind.)

4-11. International Geological Cong., 20th, Mexico, D.F. (Congreso Geológico Internacional, Calle Balderas 36, Despacho 302-A, Mexico, D.F.)

4-11. International Paleontological Union, Mexico, D.F. (H. E. Vokes, Johns Hopkins Univ., Baltimore 18, Md.)

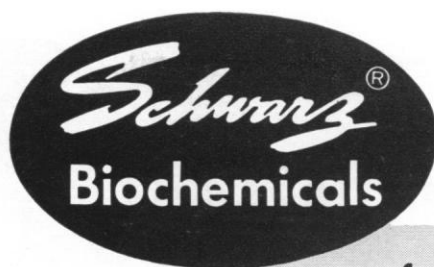
5-7. Wyoming Geological Field Conf., 11th annual, Moran, Wyo. (K. W. Frielinghausen, Box 1571, Casper, Wyo.)

5-13. International Cong. of Applied Mechanics, 9th, Brussels, Belgium. (H. L. Dryden, Director, National Advisory Committee for Aeronautics, Washington 25.)

6-8. American Political Science Assoc., annual, Washington, D.C. (E. M. Kirkpatrick, APSA, 1726 Massachusetts Ave., NW, Washington 6.)

6-8. Phi Sigma Soc., Ann Arbor, Mich. (K. F. Lagler, Dept. of Fisheries, School of Natural Resources, Univ. of Michigan, Ann Arbor.)

15 JUNE 1956



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