of the canines of lions shows a bimodal distribution. Ewer's examination of sabertooth canines revealed no separation of sexes. The discussants concluded that until more is known of the many smaller felids, an understanding of mating patterns in felids will largely be speculative.

Propagation and management of captive species is important to managers of zoos. R. Thompson (University of Oklahoma and Oklahoma City Zoo) reviewed reproductive success in captive cheetahs. Thompson's final consensus was that until zoos publish the conditions associated with unsuccessful breeding attempts, it is impossible to determine what factors, if any, favor success in captive propagation.

Basing his models on extensive research with house cats, E. Colby (Dartmouth Medical School) developed techniques that enable him to artificially induce estrus in the bobcat. This has opened the door to achieving reproduction by totally artificial methods. S. Seager (Oregon Medical School) reported on his counterpart research in collection and storage of semen.

D. Shorey and Eaton (World Wildlife Safari) reported on the behavior and management of Bengal tigers (*Panthera tigris*) in the first seminatural habitat designed for this species. The unsociability of tigers was reflected in their partitioning of space. Of significance to zoo management were the observations of tigers daily eating grass, suggesting that zoo tigers may require grass on a regular basis.

In the more confined condition of many conventional zoos, stress is often exhibited by pairs of unsociable species housed together in the same cages. Apparent anxiety often appears in females about to give birth, resulting in obstruction of proper maternal care. In an attempt to solve these and related problems, J. W. Foster (Woodland Park Zoo) conducted experiments using Psymod, a mild tranquilizer. His data are inconclusive, but it would appear that Psymod is grossly superior to other tranquilizers in that it does not interfere with feeding and drinking.

The conference was sponsored by World Wildlife Safari, Winston, Oregon, and Institute for the Study and Conservation of Endangered Species, Athens, Georgia, and was held on 3 to 5 May 1973 in Winston, Oregon.

RANDALL L. EATON

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## 19 JULY 1974

## Forthcoming Events

## August

4–9. Conference on **Safety of Small Dams**, Engineering Foundation, Henniker, N.H. (EF, 345 E. 47 St., New York 10017)

5-8. Potato Assoc. of America, Pasco, Wash. (H. J. Murphy, 114 Deering Hall, Univ. of Maine, Orono 04473)

5-8. **Poultry Science** Assoc., Morgantown, W.Va. (C. B. Ryan, Dept. of Poultry Science, Texas A&M Univ. College Station 77843)

5-9. Molecular Biology and Pathology, 7th annual conf., Saratoga Springs, N.Y. (K. T. Lee, Dept. of Pathology, Albany Medical College, Albany, N.Y. 12208)

5-10. World Conf. on Medical Informatics (1st), jointly with Intern. Federation for Information Processing (6th triennial), sponsored by IFIP's Technical Committee for Information Processing Medicine, Stockholm, Sweden. (F. E. Heart, Bolt Beranek and Newman, Inc., 50 Moulton St., Cambridge, Mass. 02138)

7-9. Applications of X-ray Analysis, 23rd annual, Metallurgy and Materials Science Div., Denver, Colo. (C. O. Ruud, MMSD, Denver Research Inst., Univ. of Denver, Denver 80210)

10-13. Soil Conservation Soc. of America, Syracuse, N.Y. (H. W. Pritchard, SCSA, 7515 Northeast Ankeny Rd., Ankeny, Iowa 50021)

10-18. National **Speleological** Soc., Decorah, Iowa. (L. A. Klein, Apt. 18-0, 98-30 57th Ave., Flushing, N.Y. 11368)

11-14. Conservation Education Assoc., 21st annual conf., Syracuse, N.Y. (D. L. Hanselman, College of Environmental Science and Forestry, State Univ. of New York, Syracuse 13210)

11-14. Genetics Soc. of America, Bloomington, Ind. (B. H. Judd, Dept. of Zoology, Univ. of Texas, Austin 78712)

11–15. American Physiological Soc., Albany, N.Y. (O. E. Reynolds, APS, 9650 Rockville Pike, Bethesda, Md. 20014)

11-16. American Acad. of Clinical Toxicology, jointly with Canadian Acad. of Clinical and Analytical Toxicology and La Soc. Française de Toxicologie Clinique, Montreal, P.Q., Canada. (J. E. Ott, Univ. of Colorado Medical Center, 4200 E. Ninth Ave., Denver, Colo. 80220)

11-16. Society for Industrial Microbiology, Memphis, Tenn. (W. M. Stark, Lilly Research Labs., Eli Lilly & Co., Indianapolis, Ind. 46206)

11-16. American Phytopathological Soc., Vancouver, B.C., Canada. (R. J. Tarleton, APS, 3340 Pilot Knob Rd., St. Paul, Minn. 55121)

11-16. Conference on Subsurface Exploration for Underground Excavation and Heavy Construction, Engineering Foundation, Henniker, N.H. (EF, 345 E. 47 St., New York 10017)

11-17. American Soc. for Horticultural Science, Guelph, Ont., Canada. (C. Blackwell, ASHS, P.O. Box 109, St. Joseph, Mich. 49085)

12-14. Conference on Research, Test and Training Reactors, American Nuclear Soc., Charlottesville, Va. (J. L. Meen, Jr., Dept. of Nuclear Engineering, Univ. of Virginia, Charlottesville)

12-15. American Hospital Assoc.,

Chicago, Ill. (J. A. McMahon, 840 N. Lake Shore Dr., Chicago 60611)

12-15. Associated **Public Safety Communications** Officers, 40th, San Diego, Calif. (S. Lane, Public Safety Systems Inc., P.O. Box 30410, Santa Barbara, Calif. 93105)

12-19. International Congr. of Acarology, 4th, Saalfelden, Austria. (E. Piffl, ICA, Zoological Inst., Univ. of Wien, Dr. Karl Lueger-ring 1, Wien I, Austria)

12-26. International Conf. on Social Science and Medicine, 4th, Elsinore, Denmark. (P. J. M. McEwan, Center for Social Research, Univ. of Sussex Falmer, Brighton, Sussex, England)

13-15. Pattern Recognition, 2nd intern. conf., Inst. of Electrical and Electronics Engineers, Computer Soc., Copenhagen, Denmark. (E. Backer, Electrical Engineering Dept., Delft Univ. of Technology, Delft, Netherlands)

13-16. Canadian Assoc. for Laboratory Animal Science, Saskatoon, Sask., Canada. (F. M. Loew, Animal Resources Centre, Univ. of Saskatchewan, Saskatoon S7N 0W0)

13-16. Institute of Mathematical Statistics, Edmonton, Canada. (G. J. Resnikoff, Office of Graduate Studies, California State Univ., Hayward 94542)

14-16. Electron Microscopy Soc. of America, St. Louis, Mo. (G. G. Cocks, Olin Hall, Cornell Univ., Ithaca, N.Y. 14850)

14-16. Society of **Protozoologists**, Middletown, Conn. (R. B. McGhee, Dept. of Zoology, Univ. of Georgia, Athens 30601) 14-17. Colombian **Internal Medicine** Congr., 3rd., Medellín. (W. Rojas, CIMC, Aptdo Aéreo 30-31, Medellín)

14-23. World Council for the Welfare of the Blind, General Assembly, Brasilia, Brazil. (World Council, 45 Ave. Bosquet, 75 Paris 7, France)

16-18. Association of Philippine Practicing Physicians in America, Cleveland, Ohio. (M. P. A. Claudio, APPPA, 132 Emerson Dr., Schaumburg, Ill. 60172)

18–22. American Soc. for Pharmacology and Experimental Therapeutics, Montreal, P.Q., Canada. (E. B. Cook, ASPET, 9650 Rockville Pike, Bethesda, Md. 20014)

18-23. American Assoc. of Clinical Chemists, Las Vegas, Nev. (J. S. King, Jr., AACC, P.O. Box 15053, Winston-Salem, N.C. 27103)

18-24. Conference on Advances in Chemistry, 16th, California Assoc. of Chemistry Teachers, Pacific Grove. (E. N. Garcia, School of Natural Sciences and Mathematics, California State College, Dominquez Hill, 90747)

18-24. International **Epidemiological** Assoc., 7th intern. scientific mtg., Brighton, England. (M. Henderson, Dept. of Preventive Medicine, School of Medicine, Univ. of Maryland, Baltimore 21201)

18-24. International Congr. of the **Transplantation** Soc., 5th, Jerusalem, Israel. (Secretariat, ICTS, P.O. Box 983, Jerusalem)

18–29. Advanced Study Inst. on Phloem Transport Conf., North Atlantic Treaty Organization, Natl. Research Council, and Natl. Science Foundation, Banff, Alta., Canada. (S. Aronoff, Dean of Science, Simon Fraser Univ., Burnaby, V5A 1S6, B.C., Canada)

19-21. Midwest Prairie Conf., 4th,

Univ. of North Dakota, Grand Forks. (M. K. Wali, Dept. of Biology, Univ. of North Dakota, Grand Forks 58201)

19-22. American Astronomical Soc., Rochester, N.Y. (H. M. Gurin, AAS, 211 FitzRandolph Rd., Princeton, N.J. 08540)

19-22. Society for the **Study of Reproduction**, 7th annual, Ottawa, Ont., Canada. (H. Robertson, SSR, Reproductive Research Section, Animal Research Inst., Ottawa, K1A 0C6)

19-23. American Crystallographic Assoc., University Park, Pa. (E. E. Snider, ACA, 335 E. 45 St., New York 10017)

19-23. International Conf. on **Planetary** Satellites, Intern. Astronomical Union, Ithaca, N.Y. (J. A. Burns, 111 Thurston Hall, Dept. of Theoretical and Applied Mechanics, Cornell Univ., Ithaca 14850) 19-23. Conference on Tradition and

19-23. Conference on Tradition and Change in Physics Graduate Education, Forum on Physics and Soc. of the American Physical Soc.; American Assoc. of Physics Teachers; and Committee on Education, American Physical Soc., University Park, Pa. (R. H. Good, Dept. of Physics, Pennsylvania State Univ., University Park 16802)

20-25. Northwest **Proctologic** Soc., Spokane, Wash. (E. Clanton, West 904 Bishop Court, Spokane 99204)

21–23. International Conf. on Engineering in the Ocean Environment, Inst. of Electrical and Electronics Engineers, Halifax, N.S., Canada. (J. Brooke, Ocean '74. P.O. Box 1006, Dartmouth, N.S.)

21–23. International Solar Energy Soc., Fort Collins, Colo. (S. Karaki, Dept. of Civil Engineering, Colorado State Univ., Fort Collins 80521)

21–24. West Virginia State Medical Assoc., White Sulphur Springs. (W. H. Lively, P.O. Box 1031, Charleston, W.Va. 25324)

22–24. **Parapsychological** Assoc., Jamaica, N.Y. (R. Stanford, St. John's Univ., Grand Central and Utopia Pkwys., Jamaica 11439)

22–24. Rocky Mountain Radiological Soc., Denver, Colo. (L. R. Wurtzebach, RMRS, 4200 E. Ninth Ave., Denver 80220)

22–25. Rural Sociological Soc., Montreal, P.Q., Canada. (J. E. Dunkelberger, Dept. of Agricultural Economics and Rural Sociology, Auburn Univ., Auburn, Ala. 36830)

22–29. International Assoc. of Limnology, 19th congr., Winnipeg, Manitoba, Canada. (R. W. Dalke, Dept. of the Environment, Freshwater Inst., 501 University Crescent, Winnipeg)

25. Israel Conf. on Aviation and Astronautics, 16th, Tel-Aviv. (M. Nimrod, Dept. of Aeronautical Engineering, Technion-Israel Inst. of Technology, Haifa, Israel)

25-28. Control of Hazardous Materials Spills Conf., American Inst. of Chemical Engineers and Environmental Protection Agency, San Francisco, Calif. (G. F. Bennett, Dept. of Chemical Engineering, Univ. of Toledo, Toledo, Ohio 43606)

25-28. Nuclear Power Plant Siting Conf., American Nuclear Soc., Portland, Ore. (J. A. Hinds, General Electric Co., Safety and Licensing M/C683, 175 Curtner Ave., San Jose, Calif. 95114)

25-29. American Medical Tennis Assoc.,

Mount Washington, N.H. (B. Drake, P.O. Box 183, Alton, Ill. 62002)

26–29. American Sociological Assoc., Montreal, P.Q., Canada. (O. N. Larsen, ASA, 1722 N St., NW, Washington, D.C. 20036)

26–29. **Biometric** Soc., Eastern North American Region, St. Louis, Mo. (F. B. Cady, Biometric Unit, 337 Warren Hall, Cornell Univ., Ithaca, N.Y. 14850)

26–29. American Statistical Assoc., St. Louis, Mo. (F. C. Leone, ASA, 806 15th St., NW, Washington, D.C. 20005)

26-30. Anesthesiology and Reanimation Soc., German Democratic Republic, Dresden. (G. Benad, Rembrandtstrasse 16/17, 25 Rostock DDR. Germany)

26-30. National Electronics and Geophysics Conf., 11th, New Zealand Electronics Inst., Inst. of Electronic and Radio Engineers, New Zealand Inst. of Engineers, Soc. of Medical and Biological Engineers, Inst. of Electrical and Electronics Engineers, and the Inst. of Electrical Engineers, Auckland, N.Z. (NELCON, Centre for Continuing Education, Univ. of Auckland, Private Bag, Auckland)

26-30. Intersociety Energy Conversion Engineering Conf., 9th, American Soc. of Mechanical Engineers, Inst. of Electrical and Electronics Engineers, American Inst. of Chemical Engineers, American Nuclear Soc., Soc. of Automotive Engineers, American Chemical Soc., and American Inst. of Aeronautics and Astronautics, San Francisco, Calif. (P. Drummond, Industry Div., ASME, 345 E. 47 St., New York 10017)

26-30. Symposium on the Physical and Biological Effects on the Environment of Cooling Systems and Thermal Discharges at Nuclear Power Stations, Intern. Atomic Energy Agency and U.N. Economic Commission of Europe, Oslo, Norway. (G. Seiler, Conf. Service Section, Div. of External Relations, IAEA, Vienna, Austria)

26-31. Symposium on Antarctic Biology, 3rd, Scientific Committee on Antarctic Research and the Intern. Union of Biological Sciences, Washington, D.C. (L. DeGoes, Natl. Acad. of Sciences, Committee on Polar Research, 2101 Constitution Ave., NW, Washington, D.C. 20418)

28–30. American Assoc. for the Advancement of Science, Alaska Div., Anchorage. (1. W. Duncan, Arctic Health Research Center, Fairbanks, Alaska 99701)

28-30. International Symp. on Fertilization in Higher Plants, Nijmegen, Netherlands. (H. F. Linskens, Dept. of Botany, Univ. of Toernooiveld, Nijmegen)

29-4. South African Radiological Soc., 3rd natl. and intern. congr., Johannesburg. (P. Sneider, Box 4878, Johannesburg)

30-3. American Psychological Assoc., New Orleans, La. (K. B. Little, APA, 1200 17th St., NW, Washington, D.C. 20036)

## September

2-5. Conference on Laser Atmospheric Studies and Intern. Laser Radar Conf., 6th, American Meteorological Soc. and Optical Soc. of America, Sendai, Japan. (V. E. Derr, Environmental Research Labs., Boulder, Colo. 80302)

2-7. British Assoc. for the Advancement of Science, Stirling, Scotland. (BAAS,

Fortress House, 23 Savile Row, London, W1X 2AA, England)

2–7. Fat Research, 12th intern. congr., Italian Oil Chemists' Soc. under the auspices of the Intern. Soc. for Fat Research, Milan, Italy. (Societa Italiana per lo Studio delle Sostanze Grasse, c/o Stazione Sperimentale Oli e Grassi, Via G. Colombo 79, 20133 Milan)

3-5. International **Rubber** Mtg., American Chemical Soc., Munich, Germany. (E. M. Dannenberg, Cabot Corp., Concord Rd., Billerica, Mass. 01821)

3-6. Canadian Medical and Biological Engineering Soc., 5th conf., Montreal, P.Q. (C. A. Laszlo, Biomedical Engineering Unit, McIntyre Medical Sciences Center, McGill Univ., 3655 Drummond St., Montreal H3G 1Y6)

3–9. American Soc. of Hospital Pharmacists, Chicago, Ill. (J. A. Oddis, ASHP, 4630 Montgomery Ave., Washington, D.C. 20014)

4-6. International Conf. on the Physician and Population Change, World Medical Assoc., Stockholm, Sweden. (W. Refshauge, 10 Columbus Circle, New York 10019)

4-6. Conference on **Physics at Ultra-High Energies**, Nuclear Physics Sub-Committee, Inst. of Physics, London, England. (Meetings Office, IP, 47 Belgrave Sq., London SW1X 8QX)

4–7. International College of Angiology, 16th annual, Montreal, P.Q., Canada. (H. E. Shaftel, 381 Park Ave., S., New York 10016)

4–7. American Assoc. of **Obstetricians** and **Gynecologists**, annual mtg., Hot Springs, Va. (J. D. Woodruff, Johns Hopkins Hospital, Baltimore, Md. 21205)

5-10. European Anesthesiology Congr., 4th, Madrid, Spain. (A. Arias, Villanueva 11, Madrid-1)

7-8. Colloquium on Genetics and Biogenesis of Chloroplasts and Mitochondria, Columbus, Ohio. (Colloquium, College of Biological Sciences, Ohio State Univ., Columbus 43210)

7-10. Society of General Physiologists, 28th annual, Pacific Grove, Calif. (S. Inoué, SGP, Box 257, Woods Hole, Mass. 02543)

8-10. Urban Transportation, 6th intern. conf., Pittsburgh Urban Transit Council. Pittsburgh, Pa. (D. S. MacLeod, P.O. Box 2149, Pittsburgh 15230)

8-11. Advanced Reactors: Physics, Economics and Design Conf., American Nuclear Soc., Atlanta, Ga. (L. E. Weaver, Dept. of Nuclear Engineering, Georgia Inst. of Technology, Atlanta 30332)

8-11. American Fisheries Soc., Honolulu, Hawaii, (R. A. Wade, AFS, 1319 18th St., NW, Washington, D.C. 20036) 8-13. American Chemical Soc., 168th natl., Atlantic City, N.J. (A. T. Winstead, ACS, 1155 16th St., NW, Washington,

D.C. 20036) 8-13. Alcohol, Drugs and Traffic Safe-

ty, 6th intern. conf., Toronto, Ont., Canada. (W. S. Schmidt, 33 Russell St., Toronto, M5S 2S1)

8-14. International Congr. of Ecology, Intern. Assoc. for Ecology and General Ecology Section, Intern. Union of Biological Sciences, The Hague, Netherlands. (R. LaNier, Lab. of Limnology, Univ. of Wisconsin, Madison 53706)