

Vol. 17, No. 2
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NEWSLETTER

ANIMAL BEHAVIOR SOCIETY

SECTION (DIVISION) ANIMAL BEHAVIOR AND SOCIOBIOLOGY

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Ecological Society of America
American Society of Zoologists

DIRECTION OF CORRESPONDENCE: Please direct correspondence other than changes of address to the Secretary, Nancy M. Jessop (address above). DIRECT CHANGES OF ADDRESS TO ABS TREASURER PAUL B. SIEGEL, DEPARTMENT OF POULTRY SCIENCE, VIRGINIA POLYTECHNIC INSTITUTE, BLACKSBURG, VA, 24061. Queries regarding membership may be directed to the Chairman of the Membership Committee, John Fentress, Department of Biology, University of Oregon, Eugene, OR 97401.

NOMINATIONS FOR 1972 ELECTION OF OFFICERS: The Nominating Committee has submitted the following names for the positions indicated:

Second President-elect:

Jerry Hirsch
John G. Vandenberg

Editor of Animal Behaviour:

Jack P. Hailman
Martin W. Schein

Treasurer:

Donald A. Dewsbury
H. B. Graves

Member-at-Large:

Nicholas S. Thompson
Roslyn P. Warren

Additional nominations may be made by letter signed by five or more members in good standing and accompanied by an indication that the nominee is willing to serve. The nominating letter should be mailed to the ABS Secretary prior to September 15. Vitae and ballots will appear in the November newsletter.

APA JOURNAL SUPPLEMENT ABSTRACT SERVICE: The Journal Supplement Abstract Service (JSAS) of the American Psychological Association publishes a quarterly "Catalog of Selected Documents in Psychology" at \$3.00 per issue or \$10.00 per year; this contains abstracts of all manuscripts accepted for publication. JSAS attempts to disseminate particularly valuable manuscripts and to provide an outlet for such materials as descriptions of techniques, bibliographies, literature reviews, educational and technical reports, and so forth. For information write to Dr. Elliott R. Siegel, Manager, JSAS, APA, 1200 17th St., N.W. Washington, D.C.

AFRICAN ANIMAL BEHAVIOR RESEARCH COMMITTEE: Dr. Jack Adams of California State College, Dominguez Hills, has proposed that an ABS committee be established for the purpose of collecting and disseminating information upon African game preserves for the benefit of ABS members who may be planning to conduct research in these areas. Dr. Adams has recently visited a number of African game preserves, and wishes to meet with interested parties during the ABS meetings in Reno.

SYMPOSIUM ON CONTEMPORARY ISSUES IN COMPARATIVE PSYCHOLOGY: A three-session symposium this summer is to be cosponsored by the International Union of Biological Sciences, the Division of Physiological and Comparative Psychology of the APA and the New York Academy of Sciences. Two sessions will be held in conjunction with the XXth International Congress of Psychology in Tokyo, August 13-19, 1972, and the third session at the 80th Annual Convention of the American Psychological Association, September 1-8, 1972, in Honolulu, Hawaii. The tentative program for the first session ("Is There a Comparative Psychology?") lists as speakers F.A. Beach, W. H. Thorpe, L. V. Krushinskii, and G. Tembrock, and is chaired by Ethel Tobach. The second session, on "Genetics and the Evolution of Behavior" features as invited speakers J. Hirsch, W. Wickler, A.D. Slonim, and T. Hidaka, and is chaired by Helmut E. Adler. The third session, on "Issues in Comparative Psychology", will be chaired by Leonore L. Adler and includes presentations by J.P. Scott, K.H. Pribram, J.M. Warren, and D.A. Dewsbury, with invited discussants including R.B. Lockard, H.P. Zeigler, E. Tobach, H.E. Adler, and speakers from the Tokyo sessions. Further details may be obtained from Leonore L. Adler, Symposium Organizing Secretary, Department of Animal Behavior, The American Museum of Natural History, New York, NY.

ABS CONSTITUTION AND BYLAWS: Fifty copies of the ABS Constitution and Bylaws are available to interested persons who should send their requests to ABS Secretary N.M. Jessop, California Western College, USIU, San Diego, CA, 92106.

DUES INCREASE APPROVED: The increase in ABS dues for regular members from \$10.00 to \$15.00 per annum effective January 1, 1973, has been approved by mail ballot with 170 "Yes" and 106 "No" replies. Increased costs of the journal and monographs constitute the major justification of the dues increase. The suggestion has been made that a category of membership be established with reduced dues for individuals not wishing to receive the journal or monographs; those who would like the Executive Committee to take this matter under consideration should write the Secretary to this effect.

ABSTRACT SERVICE: Abstract Associates, 807 Hillsboro Drive, Silver Spring, MD, 20902, provides English language translations of scientific and technical material as ordered, from French, German, or Russian. Those interested should contact Dr. Bergene Kavin, Manager.

DEADLINE FOR CONTRIBUTIONS TO AUGUST NEWSLETTER: All items must be received before June 10 by the Editor who plans to be away from San Diego during July and August.

PERIODICAL ARTICLES RECOMMENDED FOR UNDERGRADUATE COURSES IN ANIMAL BEHAVIOR:

The following titles have been selected from lists submitted by ABS members responding to the Education Committee's questionnaire circulated with the November Newsletter. Also recommended but mostly not listed below are a number of articles from Scientific American which are available as reprints.

- Baerends. 1958. Contribution of ethology to the study of causation. Acta Physiol. Pharmacol. Neerlandica 7: 466-499
- von Holst and von St. Paul 1963. On the functional organization of drives. Animal Behaviour 11: 1-20.
- Siegel 1965. Genetics of behavior: Selection for mating ability in chickens. Genetics 52: 1269-1277
- Morris 1957. "Typical intensity" and its relation to problems of ritualization. Behaviour 11: 1-12.
- Calhoun 1962. Population density and social pathology. Sci. Amer. 206: 139-148.
- Ehrman 1966. Mating success and genotypic frequency in *Drosophila*. Animal Behaviour 14: 332-339.
- Hamburger 1963. Some aspects of the embryology of behavior. Quart. Rev. Biol. 38: 342-365.
- Dilger 1962. The behavior of lovebirds. Sci. Amer. 206: 89-98.
- Dilger 1962. Methods and objectives of ethology. Living Bird 1: 83-92.
- Boice 1971. Laboratorizing the wild rat (*Rattus norvegicus*). Behav. Res. Meth. and Instru. 3: 177-182.
- Bitterman 1960. Toward a comparative psychology of learning. Amer. Psychol. 15: 704-712.
- Kavanau 1967. Behavior of captive white-footed mice. Science 155: 1623-1629.
- Bertrand 1967. Training without reward. Science 155: 484-486.
- Horwich 1965. Ontogeny of wing flashing. Wilson Bull. 77: 264-281.
- Bartholomew 1963. Behavioral adaptations of mammals to the desert environment. Proc. 16th Internat. Cong. Zool. Wash., D.C., 49-52.
- Tinbergen 1963. On the aims and methods of ethology. Z. Tierpsychol. 20: 410-433.
- Delius 1969. A stochastic analysis of the maintenance behavior of skylarks. Behaviour 33: 137-163.
- Oppenheim 1970. Some aspects of embryonic behavior in the duck. Animal Behaviour 18: 335-352.
- Gottlieb 1968. Prenatal behavior in birds. Quart. Rev. Biol. 43: 148
- Hodos and Campbell 1969. *Scala naturae*: Why there is no theory in comparative psychology. Psych. Rev. 76: 337-350.
- King 1958. Parameters relevant to determining the effects of early experience upon the adult behavior of animals. Psychol. Bull. 55: 46
- Scott 1962. Critical periods in behavioral development. Science 138: 949-958.
- Harlow 1962. The heterosexual affectional system in monkeys. Amer. Psychol. 17: 1-9.
- Gallup 1970. Chimpanzees: Self-recognition. Science 167: 86-87.
- Beach 1950. The snark was a boojum. Amer. Psychol. 5: 115-124
- Beach 1955. The descent of instinct. Psychol. Rev. 62: 401-410.
- Lehrman et al 1961. The presence of the mate and of nesting material as stimuli for the development of incubation behavior and for gonadotrophin secretion in the ring dove. Endocrinol. 68: 507-516.
- Wilson and Bossert 1963. Chemical communication among animals. Recent Prog. Hormone Res. 19: 673-716.
- Lockard 1971. Reflections on the fall of comparative psychology. Amer. Psychol. 26: 168-179.
- Staddon and Simmelharz 1971. The superstition experiment. Psych. Rev. 78: 3-43.
- Lashley 1938. Experimental analysis of instinctive behavior. Psych. Rev. 45: 445-471.
- Fuller 1964. Physiological and populative aspects of behavior genetics. Amer. Zool. 4: 101-109.
- Marler 1967. Animal communication signals. Science 157: 769-774.

- Moltz 1965. Contemporary instinct theory and the fixed action pattern. Psych. Rev. 72: 27-47.
- Moltz 1963. Imprinting: An epigenetic approach. Psychol. Rev. 70: 123-138
- Keeton 1969. Orientation by pigeons. Science 165: 922-928.
- Hess 1959. Imprinting. Science 130: 133-141.
- Eibl-Eibesfeldt and Kramer 1958. Ethology, the comparative study of animal behavior. Quart. Rev. Biol. 33: 181-211.
- Konish 1965. The role of auditory feedback in the control of vocalization in the white-crowned sparrow. Z. Tierpsychol. 22: 770-783.
- Wiepkema 1961. Ethological analysis of the reproductive behavior of the bitterling. Arch. Neerl. Zool. 14: 103-199.
- Altmann 1965. Sociobiology of rhesus monkeys, II. Stochastics of social communication. J. Theoret. Biol. 8: 490-505.
- Altmann 1968. Sociobiology of rhesus monkeys, III. Basic communication network. Behaviour 32: 17-32.
- Schein 1963. On the irreversibility of imprinting. Z. Tierpsychol. 20: 462-467.
- Rothenhuhler 1964. Behavior genetics of nest cleaning in honeybees, IV. Responses of F₁ and backcross generations to disease-killed brood. Amer. Zool. 4: 111-123.
- Sharpe and Johnsgard 1966. Inheritance of behavioral characters in F₂ mallard X pintail (Anas platyrhynchos L. X Anas acuta L.) hybrids. Behaviour 27: 259-272.
- Roeder 1965. Moths and ultrasound. Sci. Amer. 212: 94-102.
- Hirsch 1963. Behavior genetics and individuality understood. Science 142: 1436-1442.
- Hinde 1959. Behaviour and speciation in birds and lower vertebrates. Biol. Rev. 34: 85-128.
- Tinbergen 1952. "Derived" activities: their causation, biological significance, origin, and emancipation during evolution. Quart. Rev. Biol. 27: 1-32.
- Tinbergen 1968. On war and peace in animals and man. Science 160: 1411-1418.
- McClearn 1963. The inheritance of behavior. In, L. Postman (ed.) Psychology in the Making, pp. 144-252. A.A. Knopf, NY.
- Fuller, Easler and Smith 1950. Inheritance of audiogenic seizure susceptibility in the mouse. Genetics 35: 622-632.
- Bruell 1964. Inheritance of behavioral and physiological characters of mice and the problem of heterosis. Amer. Zool. 4: 125-138.
- Levine 1966. Sex differences in the brain. Sci. Amer. 214: 84-90.
- Lorenz 1958. The evolution of behavior. Sci. Amer. 199: 67-78.
- Seligman 1970. On the generality of the laws of learning. Psychol. Rev. 77: 406
- Smith 1963. Vocal communication of information in birds. Amer. Nat. 97: 117-125
- Lockard 1968. The albino rat: A defensible choice or a bad habit? Amer. Psychol. 23: 734-742.
- Gardner and Gardner 1969. Teaching sign language to a chimpanzee. Science 165: 664-672.
- Skinner 1966. The phylogeny and ontogeny of behavior. Science 153: 1205-1213.
- Horridge 1963. Learning of leg positions by headless insects. Nature 193: 697-698.
- Waters 1958. Behavior: Datum or abstraction. Amer. Psychol. 13: 278-282.
- Klopfer 1965. Imprinting: A reassessment. Science 147: 302-313.
- Young 1961. Learning and discrimination in the octopus. Biol. Rev. 36: 32-96.
- Griffin 1952. Bird navigation. Biol. Rev. 27: 359-400.
- Schneirla 1934. The process and mechanism of ant learning. J. Comp. Psychol. 17: 303-328.
- Schneirla 1950. The relationship between observation and experimentation in the field study of behavior. Annals of the N.Y. Acad. Sci. 51: 1022-1044.
- Orians 1969. On the evolution of mating systems.... Amer. Nat. 103: 589-603.
- Breland and Breland 1961. The misbehavior of organisms. Amer. Psychol. 16: 681-684.

ANIMAL BEHAVIOR SOCIETY MEETINGS
University of Nevada, Reno, Nevada
June 13-16, 1972

REGISTRATION, MEETING ROOMS, HOUSING and MEALS

The University of Nevada campus extends northward from the crossing of North Virginia St. (Hwy 395) and 9th Street. The ABS meeting rooms will be in the Lecture Demonstration Building, at the north end of campus. Conference participants who preregistered and requested dormitory accommodations will be staying at campus dormitories on North Virginia Street. Those who requested motel accommodations when they preregistered will be staying at Tiny's Motel, 850 North Virginia. For those who requested campground accommodations on the preregistration form, reservations have been made at Davis Campground, which is 22 miles south of Reno on U.S. 395, and at the closer campground, KOA, which is at 600 Freeport Lane, three miles north of campus. Conference participants may purchase meals at the Jot Travis Union cafeteria for approximately \$3.50 a day.

Members of the Local Arrangements Committee will maintain a registration desk at Nye Hall dormitory from 4 p.m. to midnight on Monday, June 12, and on June 13, from 8 A.M. to 10 P.M. in Room 10, Mack Social Sciences. This room will also be used as a coffee lounge throughout the period of our meetings. Registrants will receive the program, name cards, and general information at the desk.

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PROGRAM OF ANIMAL BEHAVIOR SOCIETY MEETINGS

TUESDAY, JUNE 13

CONCURRENT SESSION I, 9:00 to 11:50 AM. ORIENTATION AND PERCEPTUAL SYSTEMS.
DAVID J. ELY, Porterville State Hospital, presiding.

- 9:00 Olfactory cues and sand digging in mice. W.E. WILSONCROFT,
San Fernando Valley State College
- 9:20 The role olfaction plays in predatory behavior of Onychomys torridus.
WILLIAM LANGLEY, Arizona State University
- 9:40 Avoidance behavior of rainbow trout to oil dispersants. JEAN-PIERRE DAEM,
Simon Fraser University
- 10:00 Auditory sensitivity and visual acuity in pinnipeds. RONALD J. SCHUSTERMAN,
California State College at Hayward.
- 10:20 COFFEE BREAK
- 10:50 The Doppler-shift sonar system in Rhinolophus. JAMES A. SIMMONS, Washington
University and DONNA J. HOWELL, Princeton University.
- 11:10 The use of echolocation by the wandering shrew, Sorex vagrans. EDWARD R.
BUCHLER and DONALD A. JENNI, University of Montana
- 11:30 Environmental influences on the orientation of nocturnal bird migrants.
KENNETH P. ABLE, State University of New York at Albany

CONCURRENT SESSION II, 9:00 A.M. to 11:50 A.M. TERRITORIAL BEHAVIOR.

ARTHUR C. RISSER, University of Nevada, presiding

- 9:00 Aggressive display and orb defense in a colonial spider. RUTH E. BUSKIRK, University of California at Davis
- 9:20 The function of poster-coloration in the territorial behavior of the Beau-gregory, Eupomacentrus leucostictus (Pisces; Pomacentridae). H. JANE BROCKMANN, University of Wisconsin
- 9:40 Socio-ecology of space usage in the anabantoid fish, Trichogaster trichopterus Pallas. DENNIS F. FREY, DEBORAH DUNN, and THOMAS LINE, California State Polytechnic College
- 10:00 Feeding behavior: a determinant of social organization of reef fishes. ERNST S. REESE, University of Hawaii
- 10:20 COFFEE BREAK
- 10:50 Spacing patterns of Bewchey ground squirrels (Citellus beecheyi). DONALD H. OWINGS and PATRICK SLUSS, University of California at Davis
- 11:10 Territoriality and population regulation in the vicuna. WILLIAM L. FRANKLIN, Utah State University
- 11:30 Amygdaloid activity relevant to modifications in territorial behavior. L.M.N. BACH, University of Nevada, Reno, L.T. HAPPEL, Louisiana State University, and E.J.-C. LU, University of California at Los Angeles

TUESDAY AFTERNOON, JUNE 13, 1972

CONCURRENT SESSION III, 1:20 P.M. to 3:00 P.M. ACTIVITY RHYTHMS.

L.M.N. BACH, University of Nevada, presiding

- 1:20 Experimental inhibition of surface activity of the bannertail kangaroo rat by an artificial moon. ROBERT B. LOCKARD, University of Washington, and DONALD H. OWINGS, University of California at Davis
- 1:40 Drinking behavior of desert birds at waterholes in southern Arizona. ALAN A. GUBANICH, University of Nevada, Reno
- 2:00 Open field activity of ornate box turtles emerging from winter torpor. MARION HARLESS, Midwestern University
- 2:20 Activity development in Rattus norvegicus: A critical period. PAUL M. BRONSTEIN, M.J. LEVINE, and F.D. WOLKOFF, Brooklyn College
- 2:40 Drosophila cleaning behavior. KAREN LOEBLICH LIPPS, University of California at Davis

CONCURRENT SESSION IV, 1:20 P.M. to 2:40 P.M. GENETICS.

HERMAN T. SPIETH, University of California, presiding

- 1:20 Selective breeding for fast and slow cricket-killing in laboratory mice. KARLA THOMAS, San Fernando Valley State College
- 1:40 Genetic analysis of shock induced threat behavior (tail rattling) in the mouse. RICHARD DENNIS ST. JOHN, University of Colorado
- 2:00 The climbing mouse: a genetic analysis. TERRY G. NEWELL, Fresno State College, THOMAS NOWAK, ARNOLD WREDE, and EDWARD RIFF, University of Washington
- 2:20 Genetics of the eclosion rhythm in Drosophila melanogaster. DALE L. CLAYTON, Walla Walla College, and JOHN V. PAIETTA, DeSales High School

SPECIAL INTEREST DISCUSSIONS, 3:00 P.M. to 5:00 P.M.

ANIMAL BEHAVIOR FILMS, 8:00 P.M.

WEDNESDAY, JUNE 14, 1972

CONCURRENT SESSION V, 9:00 A.M. to 11:50 A.M. COMMUNICATION.

ROGER S. FOUTS, University of Oklahoma, presiding

- 9:00 Olfactory discrimination between estrous and diestrous females by male collared lemmings (*Dicrostonyx groenlandicus*). M.C. TYLER, J.F. HASLER, and E.M. BANKS, University of Illinois
- 9:20 The use of sounds in the cichlid fish, *Cichlasoma centrarchus*. ABBY SCHWARZ, University of California at Berkeley
- 9:40 Sound discrimination by the bicolor damselfish, *Eupomacentrus partitus*. ARTHUR A. MYRBERG and JUANITA Y. SPIRES, University of Miami
- 10:00 Vocal characteristics of male mallard ducklings. F. RUSSEL LOCKNER, Sonoma State College
- 10:20 COFFEE BREAK
- 10:50 Analysis and observations of the calls of the Southern Grasshopper Mouse. JOHN H. HOPWOOD and STACY K. LI, University of California at Davis
- 11:10 The nest relief ceremony in three species of Antarctic penguins, DIETLAND MULLER-SCHWARZE and CHRISTINE MULLER-SCHWARZE, Utah State University
- 11:30 The strut display of the male sage grouse: a "fixed" action pattern. R. HAVEN WILEY, University of North Carolina

CONCURRENT SESSION VI, 9:00 A.M. to 12:00 P.M. SEXUAL AND PARENTAL BEHAVIOR.

RUTH E. BUSKIRK, University of California, presiding

- 9:00 The effect of antigonadotropins in infancy on adult behavior in the rat. J.M. McCULLOUGH and D.M. QUADAGNO, University of Kansas, and B.D. GOLDMAN, University of Connecticut
- 9:20 The effect of gonadal hormones in infancy on maternal behavior in the rat. D.M. QUADAGNO, J. ROCKWELL, and B. LANGAN, University of Kansas
- 9:40 Dominance, sexual behavior and the Coolidge effect. RICHARD E. BROWN, Dalhousie University
- 10:00 Refutation of pre-copulatory feeding of male by female in the Andean Hillstar Hummingbird. LYNN CARPENTER, University of California at Berkeley
- 10:20 COFFEE BREAK
- 10:40 Chemical recognition of young by the Red Devil Cichlid. KENNETH R. McKAYE and GEORGE W. BARLOW, University of California at Berkeley
- 11:00 Sexual behavior and social structure in unisexual-bisexual *Poeciliopsis* (Pisces; Poeciliidae). FRANCIS E. McKAY, Fordham University
- 11:20 Aggression and submission in Hawaiian *Drosophila plantibia* species. HERMAN T. SPIETH, University of California at Davis
- 11:40 Jousting behavior in Hawaiian *Drosophila*. JOHN M. RINGO, University of California at Davis

WEDNESDAY AFTERNOON, JUNE 14, 1972

SYMPOSIUM, ANIMAL COMMUNICATION AND HUMAN LANGUAGE: A DISCONTINUITY IN APPROACH OR IN EVOLUTION? 1:15 P.M. to 4:15 P.M., Chairman, BEATRICE T. GARDNER, University of Nevada

- 1:15 Signal diversity and strategies of development. PETER MARLER, Rockefeller University
- 1:45 The comparative psychology of two-way communication. R. ALLEN GARDNER, University of Nevada, Reno
- 2:15 Specialization of the human brain for language. NORMAN GESCHWIND, Harvard Medical School
- 2:45 The search for comparative variables in human speech. HARVEY SARLES, University of Minnesota
- 3:15 Concluding remarks, BEATRICE T. GARDNER, University of Nevada, Reno
- 3:30 Open discussion

INVITED ADDRESS, 5:00 P.M. THE EFFECTS OF TESTOSTERONE ON PERSISTENCE.
R.J. ANDREW, University of Sussex

THURSDAY, JUNE 15, 1972

CONCURRENT SESSION VII, 9:00 A.M. to 11:30 A.M. LEARNING AND CONDITIONING.
RICK M. GARDNER, Southern Colorado State College, presiding

- 9:00 Heart rate conditioning in the rainbow trout and goldfish. MERLE E. MEYER and RICHARD ERSPAMER, Western Washington State College
- 9:20 Behavioral thermoregulation in sham and hypophysectomized rainbow trout. LAWRENCE H. FRANK and MERLE E. MEYER, Western Washington State College
- 9:40 Conditional discrimination learning by a reptile. JOHN T. WILLIAMS, JR. and Jon H. Moss, University of South Carolina
- 10:00 Observational learning in chicks. KERMIT T. HOYENGA and JEFF EHLRT, Western Illinois University
- 10:20 COFFEE BREAK
- 10:50 The acquisition and testing of gestural signs in four young chimpanzees (Pan troglodytes). ROGER S. FOUTS, University of Oklahoma
- 11:10 Phyletic relations between classical and operant conditioning. JOHN HARALSON and WILLIAM BECKWITH, California State College at Los Angeles

CONCURRENT SESSION VIII, 9:00 A.M. to 11:50 A.M. DOMINANCE AND SOCIAL STRUCTURE.
GERALD P. GINSBURG, University of Nevada, presiding

- 9:00 The development of attachments in 3-year-old heterosexually naive Rhesus monkeys (Macaca mulatta). J. ERWIN, E. BRANDT, and G. MITCHELL, of California at Davis
- 9:20 Dormant dominance in Rhesus monkeys. JOHN A. FARQUHAR and JOAN S. LOCKARD, University of Washington
- 9:40 Dogs: drugs and dominance behavior. JACK WERBOFF, University of Connecticut Health Center
- 10:00 Social development in canids and species-typical action patterns. MARC BEKOFF and MICHAEL W. FOX, Washington University
- 10:20 COFFEE BREAK

- 10:50 Behavior profiles and physiological correlates of socially deprived CBA mice. DANIEL ELY and JAMES HENRY, University of Southern California.
- 11:10 Social hierarchy and scent marking in fox squirrels (*Sciurus niger*). BARBARA N. BENSON, Southern Illinois University
- 11:30 Interspecific imposition of social structure. GEORGE W. BARLOW, University of California at Berkeley

FIELD TRIP, 12:00 noon to 5:00 P.M., Pyramid Lake. Directed by Fred A. Ryser and Jan Snyder, University of Nevada

SPECIAL INTEREST DISCUSSIONS, 3:00 P.M. to 5:00 P.M.

ANIMAL BEHAVIOR FILMS, 8:00 P.M.

FRIDAY, JUNE 16, 1972

CONCURRENT SESSION IX, 9:00 A.M. to 11:50 A.M. ECOLOGICAL AND INTERSPECIFIC RELATIONS. WILLIAM H. BUSKIRK, University of California, presiding

- 9:00 Adaptive aspects of coloration and parental behavior in a new world cichlid fish. JEFFREY R. BAYLIS, University of California at Berkeley
- 9:20 Observations on the behavior of the cichlid fish, *Etroplus maculatus*, in the natural habitat in Ceylon. JACK A. WARD, Illinois State University
- 9:40 A cleaning symbiosis between the cichlid fishes *Etroplus maculatus* and *Etroplus suratensis*. RICHARD L. WYMAN and JACK A. WARD, Illinois State University.
- 10:00 Interactions among sympatric species of lizards. JAN SNYDER, University of Nevada, Reno
- 10:20 COFFEE BREAK
- 10:50 Habitat preferences in Herring Gull chicks. JON LIEN and C. NOSEWORTHY, Memorial University of Newfoundland
- 11:10 Behavioral thermoregulation in the Ostrich, *Struthio camelus*. SAMUEL M. MCGINNIS, California State College at Hayward, VIRGINIA A. FINCH and LEW HORXTHAL, University of Nairobi, Kenya
- 11:30 Relationships between behavioral adaptations and body size in Arctic and subarctic mammals. FRED A. RYSER, JR., University of Nevada, Reno

CONCURRENT SESSION X, 9:00 A.M. to 11:30 A.M. MOTIVATION. GEORGE W. BARLOW, University of California, presiding

- 9:00 A lizard display as a fixed action pattern. JUDY STAMPS, University of California at Berkeley
- 9:20 Intraspecific and interspecific behavior of *Citellus leucurus* and *C. mohavensis*. GARY A. ADEST and VELMA J. VANCE, California State College at Los Angeles
- 9:40 Free exploration in laboratory mice. PAUL McREYNOLDS, University of Nevada
- 10:00 Aggression and mortality in captive European species of starling. ARTHUR C. RISSER, University of Nevada, Reno
- 10:20 COFFEE BREAK
- 10:50 Intraspecies agonistic behavior among wild animals in the game reserves of eastern Africa. JACK ADAMS, California State College, Dominguez Hills
- 11:10 Pheromones, fighting, and mammalian reproductive physiology. R. CHARLES BOELKINS, Stanford University

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TEXTS AND COLLATERAL BOOKS USED IN UNDERGRADUATE COURSES IN ANIMAL BEHAVIOR:

The following titles were submitted by two or more individuals in response to a recent Education Committee questionnaire which was circulated with the ABS Newsletter; titles submitted by only one person have not been included here. The number in parenthesis indicates the number of persons who indicated that 3 or more chapters are assigned in that book.

- Hinde Animal Behaviour, 2nd ed. (15)
Marler and Hamilton Mechanisms of Animal Behavior (15)
Manning An Introduction to Animal Behavior (15)
Eibl-Eibesfeldt Ethology, The Biology of Behavior (11)
McGill (ed) Readings in Animal Behavior (8)
Roe and Simpson (eds) Behavior and Evolution (2)
Denny and Ratner Comparative Psychology, 2nd Ed. (5)
Kuo The Dynamics of Behavioral Development (2)
Lorenz Evolution and Modification of Behavior (4)
Lorenz King Solomon's Ring (2)
Lorenz On Aggression (4)
Maier and Maier Comparative Animal Behavior (5)
McGaugh, Weisberger and Whalen Psychobiology (Sci. Amer. Readings) (5)
Dethier and Stellar Animal Behavior, 3rd ed. (3)
Hafez The Behavior of Domestic Animals, 2nd ed. (3)
Tinbergen Animal Behavior (Time-Life Books) (3)
Tinbergen Social Behaviour in Animals (2)
Tinbergen Curious Naturalists (3)
Tinbergen The Study of Instinct (2)
Morris The Naked Ape (3)
Barnett The Rat (3)
Dethier To Know a Fly (2)
Tavolga Principles of Animal Behavior (2)
Klopfer and Hailman Introduction to Animal Behavior (2)
Aronson, Tobach, Lehrman and Rosenblatt (eds)
Development and Evolution of Behavior (2)
Roeder Nerve Cells and Insect Behavior, 2nd ed. (2)
Schiller Instinctive Behaviour: Development of a Modern Concept (2)

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