

# PROCEEDINGS OF THE NINETY-FOURTH STATED MEETING OF THE AMERICAN ORNITHOLOGISTS' UNION

GEORGE E. WATSON, SECRETARY

THE Ninety-fourth Stated Meeting of the American Ornithologists' Union was held 9-13 August 1976 at Haverford College, Haverford, Pennsylvania, under the joint sponsorship of the College, the Academy of Natural Sciences of Philadelphia, and the Delaware Valley Ornithological Club. Additional contributors were the Delaware Museum of Natural History and the Delmarva Ornithological Society. Business and technical sessions were held in various rooms in the Dining Center, in Stokes Auditorium, and in Roberts Hall. Evening social sessions were held in the Dining Center, the Delaware Museum of Natural History in Greenville and the DuPont Country Club in Wilmington. Most of the participants were housed on the Haverford College Campus and ate meals in the cafeteria of the Dining Center. Field trips were taken to Brigantine and Bombay Hook National Refuges, and to Stone Harbor in New Jersey.

## BUSINESS SESSIONS

The Council met in the morning and afternoon on 9 August and again in the afternoon and evening on 11 August. The Fellows met in the late afternoon of 9 August; the Fellows and Elective Members met in the evening of 9 August. A summary of the important actions at these meetings follows:

*Future meetings.*—The Ninety-fifth Stated Meeting will be held at the University of California, Berkeley, California, 22-26 August 1977 at the invitation of the Museum of Vertebrate Zoology and the University. The Fellows and Elective Members accepted an invitation from the University of Wisconsin to hold the Ninety-sixth Stated Meeting at Madison, Wisconsin, in late August 1978. The Union had previously accepted an invitation from the American Museum of Natural History, the National Audubon Society, the New York Zoological Society, and the Linnean Society of New York to hold its Centennial Meeting in New York City in 1983.

The Council approved preliminary funding for a history of American ornithology to be issued to celebrate the Centennial. The author will be Kier B. Sterling, who will work in collaboration with Richard C. Banks, Walter Bock, and a group of other as yet unnamed ornithologists. They will seek grants for further funding of the project.

At the meeting of the Fellows and Elective Members, Wesley E. Lanyon was elected President; Harrison B. Tordoff was elected President-elect; Brina Kessel was elected Vice-President; George E. Watson was re-elected Secretary; and John A. Wiens was re-elected Treasurer; Richard T. Holmes, Joseph R. Jehl, Jr., and Richard L. Zusi were elected to 3-year terms on the Council; Ned K. Johnson was elected to fill the 2-year term vacated by the election of Tordoff to President-elect; and Kenneth C. Parkes was elected to fill the 1-year term vacated by the resignation of Frances C. James. (In a later mail vote, Joel Cracraft was elected Treasurer. He took over the office 1 January 1977 when Wiens assumed the responsibilities of Editor-elect of *The Auk*.)

*Awards.*—The William Brewster Memorial Award was made to Gordon H. Orians for his studies on the evolutionary ecology of birds. The Elliott Coues Award was presented to Peter Marler for his work on song learning and song dialects in birds (For citations see pp. 138-9).

The Committee on Student Awards announced that Marcia Brady Tucker Awards in support of travel to the A.O.U. meeting in Haverford were made to Diana G. Matthiesen, San Jose State University, San Jose, California; Jerre A. Stallcup, University of South Florida, Tampa, Florida and Christopher H. Stimson, College of William and Mary, Williamsburg,

Virginia, all of whom presented papers at the meeting. The Committee also awarded 1-year memberships in the A. O. U. to 38 students (29 graduate students, 5 seniors, 2 juniors, and 2 freshmen) enrolled in 28 institutions in 22 states and 1 Canadian province.

The Committee on Research Awards made Josselyn Van Tyne Research Awards to five persons for four projects as follows: Dan G. Busby and J. Paul Goossen, Department of Zoology, University of Manitoba, Winnipeg: "Feeding ecology and social behavior of wintering Yellow Warblers (*Dendroica petechia*)," \$305; Susan Hannon, Department of Zoology, University of Alberta, Edmonton: "The relationship of behavior and reproductive physiology of female Blue Grouse to their distribution on the summer range," \$200; Victor Krauthamer, Division of Biology, State University of New York, Buffalo, New York: "The use of a coastline for guidance of low-flying nocturnal migrants," \$265; and James A. Rodgers, Department of Biology, University of South Florida, Tampa, Florida: "Breeding behavior of the Little Blue Heron," \$185. Awards for the best student paper presented at the meeting went to D. Caldwell Hahn, Institute of Animal Behavior, Rutgers University, Newark, New Jersey, who spoke on "Hatch order and fledging success of Laughing Gull chicks," and to Judith L. Hand, Department of Biology, University of California, Los Angeles, California, who spoke on "Message analysis of the choking display of the Western Gull (*Larus occidentalis*)."

*Membership.*—The Treasurer's report on membership showed that at the end of July 1976 there were 3881 members, an increase of 221 from last year. Numbers in various classes were:

Members.....	3420
Elective Members.....	247
Fellows.....	121
Corresponding Fellows.....	73
Honorary Fellows.....	20

Total membership includes 1 Benefactor ( + 3 deceased), 16 Patrons ( + 21 deceased), 483 Life Members, 96 Life Elective Members, and 59 Life Fellows; 41 members resigned during the year, and 291 were suspended.

During the year between meetings the officers learned of the deaths of 9 Members, 2 Elective Members, 1 Corresponding Fellow, and 2 Honorary Fellows as follows: Richard Archbold (M), Lilla C. Below (M), Mrs. James Frank Dobie (M), Rev. Albert I. Good (EM), Louisa Hunnewell (LM), Sir Julian Huxley (HF), John Lane (M), Donald D. McLean (M), Frank P. Mathews (M), Russell J. Rutter (M), Boris C. Stegmann (HF), George Clive Toner (LM), Seinosuke Uchida (CF), Leonard Wing (LEM).

In the meetings of 9 August, the following persons were elected to special classes of membership: HONORARY FELLOW—Robert A. Hinde (United Kingdom), Klaus Immelmann (German Federal Republic), Alfred W. Johnson (Chile); CORRESPONDING FELLOW—Jurgen Aschoff (German Federal Republic), Heinrich Dathe (German Democratic Republic), Valery Ilyichev (U.S.S.R.), Christian Jouanin (France), Vinzenz Ziswiler (Switzerland); FELLOW—Russell P. Balda, Jon C. Barlow, Jerram L. Brown, Joel Cracraft, Stephen T. Emlen, J. Alan Feduccia, Frank B. Gill, Jack P. Hailman, Frances C. James, Robert E. Ricklefs, Stephen M. Russell, George C. West; ELECTIVE MEMBER—Luis F. Baptista, F. Lynn Carpenter, Kenneth L. Crowell, Alexander Cruz, John E. duPont, Mercedes S. Foster, Stephen D. Fretwell, James A. Gessaman, Henry A. Hespenheide, George L. Hunt, Jr., David J. T. Hussell, William T. Keeton, Thomas E. Lovejoy, David A. Manuwal, R. Guy McCaskie, Paul Mundinger, Harvey K. Nelson, C. John Ralph, James D. Rising, Sievert A. Rohwer, Susan M. Smith, Stanley A. Temple, Nicholaas A. Verbeek.

*Finances.*—The Investing Trustees, chaired by Melvin A. Traylor, Jr., reported that the value of the Merged Assets Account as of 30 June 1976 was \$308,639.00; an increase of \$23,462.37 or 8.3% since last year's report. The total value includes a capital addition of \$10,000 to the general Endowment Fund during the year. The estimated net income for the 12 months ending 31 July 1976 was \$13,192.28; an increase of \$574.08 over the previous year.

The Council reelected Melvin A. Traylor, Jr., Chairman, Cyrus Mark, and James A. Ware as Investing Trustees.

The report of the Treasurer John A. Wiens for fiscal year 1975 appears in full at the conclusion of these proceedings. The Alexander Wetmore Research Fund established in spring 1976 totalled \$5,190.94 with contributions from 162 persons.

*Publication matters.*—Oliver L. Austin, Jr., Editor of *The Auk*, reported that the first three numbers of volume 93 (1976), contain a total of 698 pages plus four supplements totalling 92 additional pages. In mid-July he had 219 unpublished manuscripts in various editorial stages (5 more than a year ago). The lag time from acceptance to publication for unsubsidized manuscripts continues to rise slowly, those to be published in the October *Auk* show an average lag of almost 18 months for lead articles and almost 16½ months for general notes. Volume 93 also contains 6 leads and 8 notes that were completely subsidized by the authors, and each was published within 4–7 months of receipt. Printing costs continue to rise, and the new contract for the *Auk* will cost 16% more than the one in operation during the last 3 years. The Council authorized the Editor to increase page size from 6 × 9 inches to 6¾ × 10 inches with a change in typebed from 26 × 42 picas to 30 × 48 picas. Although this change will increase per-page type-setting costs, it will reduce waste paper and printing costs by 15–20%, and the Editor calculates it should save the A.O.U. approximately \$1000 per year. The Council also authorized the Editor to run abstracts at the beginning of articles in 8-point type rather than a 10-point summary at the end. The new page format will permit contributors to publish approximately 7200 words per article free of page charges in comparison to 6000 words in the former page size.

Oliver L. Austin, Jr., was re-elected Editor of *The Auk*; John A. Wiens was elected Editor-elect of *The Auk* to begin with volume 95 (1978); the periodical literature and book review sections will continue under Associate Editors Herbert W. Kale II and Walter Bock. Judith W. McIntyre will serve as Index Editor.

J. W. Hardy, Editor of Ornithological Monographs, reported that three Monographs had already been published during the year and that another one should appear in late August. Another paper is currently in press and should appear in late 1976 or early 1977. A massive Monograph, tentatively entitled, "The ecology and behavior of the Prairie Warbler," by Val Nolan, Jr., should go to press in October. Another paper has been refereed and accepted, and the Editor expects to receive the final revision of an additional paper soon. Five manuscripts are currently being refereed, and four more have already been refereed and are awaiting revision by the authors. The Editor hopes that shortly he can begin to publish an average of five or six average length Monographs per year. The Council authorized the Editor to combine 2 or more short related manuscripts under one binding in order to accommodate papers intermediate between those of *Auk* length (about 12 printed pages) and minimum Monograph length (50 pages).

Eugene Eisenmann, Chairman of the Committee on Classification and Nomenclature, reported that the Committee had almost completed the manuscript for a 33rd supplement to the A.O.U. Check-list bringing the nomenclature of North American birds up to date (see *Auk* 93: 875–879). Burt L. Monroe Jr. was added to the Committee.

Ralph S. Palmer, Editor of the *Handbook of North American Birds*, reported that volumes 2 and 3 of the *Handbook* were published April 21, 1976 and 1000 copies of volume 1 had already been reprinted earlier this year. The current price is \$30 a volume (*vs.* \$15 for the first printing of volume 1). The Council reviewed various alternatives for preparation and publication of additional volumes of the *Handbook* and authorized the President to appoint an *ad hoc* committee to consider alternatives.

The Council authorized the Chairman of the Committee on Public Responsibilities and the Secretary to send out a newsletter to all members on an experimental basis. The Council will later review whether the Newsletter should become a permanent A.O.U. communication and whether it might be jointly distributed with other national ornithological societies. The Coun-

cil also authorized the Secretary and Treasurer to look into the feasibility of combining the A.O.U. membership lists with those of other ornithological societies into a single mailing list.

*Resolutions procedure.*—There was no action on Bylaws during the meeting, but the Council approved a procedure on submission and ratification of resolutions as follows:

The President shall appoint annually a Committee on Resolutions consisting of at least three members. This Committee will receive proposed resolutions from Members and committees of the A.O.U. up to 30 days prior to the commencement of a Stated Meeting. The Committee and Council may develop resolutions on their own behalf at any time. Resolutions may treat any appropriate subject not dealt with under the Bylaws of the A.O.U. The Committee shall forward to the Council, at its first meeting at a Stated Meeting, properly worded versions of all proposals along with recommendations on adoption or rejection of each proposed resolution. The Council may approve a resolution by two-thirds vote of the members present. The Council will refer resolutions that it approves to the entire membership at a general session, where they may be ratified by a vote of the majority of the members present.

#### ATTENDANCE

Registration at the meeting totaled 478 persons from 42 states, the District of Columbia and Puerto Rico, 4 provinces of Canada, and from Australia, Austria, the Dominican Republic, Switzerland, and the United Kingdom. The largest groups of attendees were from New York (56), Pennsylvania (52), Michigan (27), Maryland (24), California (20), Florida (19), New Jersey (19), and Ohio (17). The list of those attending (most without addresses) may be obtained from the Secretary for \$1.00.

#### PUBLIC SESSIONS

General sessions and paper sessions were held in Roberts Hall, Stokes Auditorium, and the Bryn Mawr Room of the Dining Center. Tuesday morning, John R. Coleman, President of Haverford College, welcomed the A.O.U. to Haverford and President John T. Emlen, an alumnus of the College, responded for the Union. Secretary George E. Watson summarized the business sessions of the previous day. Frank B. Gill, Chairman of the Local Committee on Arrangements, made several general announcements. J. Alan Feduccia, Chairman of the Committee on the Scientific Program, introduced the scientific program and chaired the invited lecture, "DNA Hybridization, A Molecular Approach to the Classification of Birds," following which contributed papers were presented in concurrent sessions. Wednesday morning there was a three-paper symposium on "The Ancestors and Origins of Birds." The full scientific program follows:

#### TUESDAY MORNING PAPERS SESSIONS

##### Invited Lecture

"DNA Hybridization": A Molecular Approach to the Classification of Birds.  
CHARLES C. SIBLEY. Peabody Museum of Natural History, Yale University,  
New Haven, CT 06520

#### CONCURRENT SESSION A

##### Breeding Biology

Visiting Red-winged Blackbird (*Agelaius phoeniceus*) nests before laying increases their failure rate. JONATHAN BART. New York Cooperative Wildlife Research Unit, Cornell University, Ithaca, NY 14853

On the relation between fledging success and forest-field edges. J. EDWARD GATES. Department of Fisheries and Wildlife, Michigan State University, East Lansing, MI 48824

The nesting response of Field and Chipping Sparrows (*Spiizella pusilla* and *S. passerina*) to plant succession on an old field in southeastern Michigan. EDWARD W. EVANS II. Section of Ecology and Systematics, Cornell University, Ithaca, NY 14853

Nest site preference and fledging success of Brown-headed Cowbirds (*Molothrus ater*) in central Washington. ROBERT K. FURRER. Department of Zoology, University of Washington, Seattle, WA 98195

Relationships between age, habitat, mating system, and reproductive success in the Indigo Bunting (*Passerina cyanea*). MICHAEL CAREY and VAL NOLAN, JR. Department of Zoology, Indiana University, Bloomington, IN 47401

Experimental analysis of nest predation in old-field habitat. CHARLES F. THOMPSON and BRADLEY M. GOTTFRIED. Department of Biology, State University College, Geneseo, NY 14454 and Department of Zoology, Miami University, Oxford, OH 45056

#### CONCURRENT SESSION B

##### Migration

Relationships between behavior, physiology and weather in transients at a migration stopover site. JOHN H. RAPPOLE and DWAIN W. WARNER. Bell Museum of Natural History, University of Minnesota, Minneapolis, MN 55455

Spring migration correlations. DANIEL SMILEY and JAMES STAPLETON. The Mohonk Trust, Mohonk Lake, New Paltz, NY 12561

The influence of weather variables on the density of nocturnal migration in spring. SIDNEY A. GAUTHREUX, JR. Department of Zoology, Clemson University, Clemson, SC 29631

Transatlantic bird migration. TIMOTHY C. WILLIAMS, JANET M. WILLIAMS, JOHN M. TEAL and CAROL MCCLINTOCK. Woods Hole Oceanographic Institution, Woods Hole, MA 02543

Slow flight during migration over the Atlantic Ocean. RONALD P. LARKIN, DONALD R. GRIFFIN, JOSE TORRE-BUENO and JOHN M. TEAL. The Rockefeller University, New York, NY 10021. Department of Zoology, Duke University, Durham, NC 27706, and Woods Hole Oceanographic Institution, Woods Hole, MA 02543

Behavioral ecology of some North American migrants in Panama. EUGENE S. MORTON. Research Division, National Zoological Park, Washington, DC 20009

## TUESDAY AFTERNOON PAPERS SESSIONS

## CONCURRENT SESSION A

*Morphology, Evolution and Systematics*

Relationships of the Andean Swallow ("Petrochelidon andecola"). KENNETH C. PARKES. *Carnegie Museum of Natural History, Pittsburgh, PA 15213*

Genetic regulation, developmental anomalies, and the evolutionary re-establishment of ancestral muscles in birds. ROBERT J. RAIKOW and STEPHEN R. BORECKY. *Department of Life Sciences, University of Pittsburgh, Pittsburgh, PA 15260*

The hallux extensor system in *Climacteris*: a unique climbing adaptation? RONALD I. ORENSTEIN. *Division of Birds, Museum of Zoology, University of Michigan, Ann Arbor, MI 48109*

Multivariate analysis of seesaw variation in the superspecies *Empidonax difficilis*. NED K. JOHNSON. *Museum of Vertebrate Zoology and Department of Zoology, University of California, Berkeley, CA 94720*

The avifauna of Sand Hill Bluff Shellmound. DIANA G. MATTHESEN. *Museum of Birds and Mammals, San Jose State University, San Jose, CA 95192*

Plumage cycles and relationship of the Laysan and Nihoa Finches. RICHARD C. BANKS and RONIE C. LAYBOURNE. *U.S. Fish and Wildlife Service, Washington, DC 20240*

Interspecific competition and the adaptive radiation of Darwin's finches. I. J. ABBOTT, L. K. ABBOTT and P. R. GRANT. *Department of Biology, McGill University, Montreal, Quebec H3C 3G1*

Exact statistical methods for studying size allometry in Florida Red-winged Blackbirds (*Agelaius phoeniceus*). FRANCES C. JAMES and JAMES E. MOSMANN. *Ecology Program, National Science Foundation, Washington, DC 20550, and Division of Computer Research and Technology, National Institutes of Health, Bethesda, MD 20014*

A new evaluation of charadriiform phylogeny. JOSEPH G. STRAUCH, JR. *Museum of Zoology, The University of Michigan, Ann Arbor, MI 48109*

Phenetic relationships within the family Gygidae. D. SCOTT WOOD. *Department of Zoology, University of Oklahoma, Norman, OK 73069*

Phenetic and phylogenetic studies of mockingbirds and their allies. JAMES L. GULLEIDGE. *Laboratory of Ornithology, Cornell University, Ithaca, NY 14853*

A new model for the shape of the bird egg. DENNIS E. VARZA and WILLIAM G. MCARTHUR. *Department of Biology and Department of Mathematics and Computer Science, Shippensburg State College, Shippensburg, PA 17527*

## CONCURRENT SESSION B

*Competition and Interaction*

Competition in sunbirds. FRANK B. GILL and LARRY L. WOLF. *Academy of Natural Sciences, Philadelphia, PA 19103 and Department of Biology, Syracuse University, Syracuse, NY 13210*

Divergent character displacement in two Mexican hummingbirds. ROBERT D. MONTGOMERY. *Department of Biology, McGill University, Montreal, Quebec H3C 3G1*

Comparative ecology of two avian predator guilds. ROBERT C. ECKHART. *Section of Ecology and Systematics, Cornell University, Ithaca, NY 14853*

Competition between Cattle Egrets and indigenous ardeids. J. BURGER. *Biology Department, Livingston-Rutgers University, New Brunswick, NJ 08903*

Weather-dependent foraging rates of some birds wintering in a deciduous woodland. THOMAS C. GRUBB, JR. *Department of Zoology, Ohio State University, Columbus, OH 43210*

Cocxistence in a wren-wrenlet-warbler guild. EDWARD N. MIBSKY. *Department of Biology, University of California, Los Angeles, CA 90024*

White vs. dark polymorphism in herons. DOUGLAS W. MOCK. *Bell Museum of Natural History, University of Minnesota, Minneapolis, MN 55455*

The role of migration in the seasonal organization of a tropical nectarivorous bird guild. JEAN-LUC DESGRANGES. *Department of Biology, McGill University, Montreal, Quebec H3C 3G1*

Sexual dimorphism and food habits of the Wattled Jacana. DAVID R. OSBORNE and GOREFRET R. BOURNE. *Department of Zoology and the Institute of Environmental Science, Miami University, Oxford, OH 45056*

Sexual dimorphism and intersexual foraging differences in a Puerto Rican hummingbird. CAMERON B. KEPLER and ANGELA K. KEPLER. *Patuxent Wildlife Research Center, Laurel, MD 20811*

Piracy in wading birds. JAMES A. KUSHLAN. *U.S. National Park Service, Everglades National Park, Homestead, FL 33030*

Feeding strategies, ratios, and winners and losers. NICOLAAS VERBEEK. *Department of Biology, Simon Fraser University, Burnaby, British Columbia V5A 1S6*

## WEDNESDAY MORNING PAPERS SESSION

## SYMPOSIUM

*The Ancestors and Origin of Birds*

Archaeopteryx, the ancestry of birds, and the origin of flight. JOHN H. OSTROM. *Curator of Vertebrate Paleontology, Peabody Museum of Natural History, Yale University, New Haven, CT 06520*

Narrative explanations and the origin of birds. WALTER J. BOCK. *American Museum of Natural History and Department of Biological Sciences, Columbia University, New York, NY 10027*

The origins of feathers and temperature regulation. PHILIP J. RECAL. *Bell Museum of Natural History, University of Minnesota, Minneapolis, MN 55455*

## WEDNESDAY AFTERNOON PAPERS SESSIONS

## CONCURRENT SESSION A

*Resource Utilization*

Niche width and abundance in forest bird communities. KENNETH P. ABLE. *Department of Biology, State University of New York, Albany, NY 12222*

Microhabitats of six emberized finches breeding synchronously in Arizona grasslands. JOHN P. TRAMONTANO. *Department of Biology, Orange County Community College, Middletown, NY 10940*

Temperate and tropical alder forest bird community structure. EDMUND W. STILES. *Department of Zoology, Rutgers University, New Brunswick, NJ 08903*

Determining avian habitat use overlap using discriminant analysis. ROBERT C. WHITMORE and E. J. HARNER. *Division of Forestry and Department of Statistics and Computer Science, West Virginia University, Morgantown, WV 26506*

Winter and breeding bird diversity in pine clearcuts in Virginia. RICHARD N. CONNER, JERRY W. VIA and IRVINE D. PRATHER. *Department of Biology, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061*

Analysis of factors affecting distribution within home-range. CHRISTOPHER K. JANISZ. *Department of Wildlife Biology, Colorado State University, Fort Collins, CO 80523*

Behavioral responses to habitat alteration by the breeding birds of selected ponderosa pine forest areas in northern Arizona. ROBERT C. SZABO and RUSSELL P. BALDA. *U.S. Fish and Wildlife Service, Patuxent Wildlife Research Center, Laurel, MD 20811, and Department of Biological Sciences, Northern Arizona University, Flagstaff, AZ 86001*

Status of the Yellow-shouldered Blackbird. WILLIAM POST and JAMES W. WILEY. *North Carolina Department of Mental Health, Raleigh, NC and Institute of Tropical Forestry, Rio Piedras, Puerto Rico 00928*

Breeding biology of the endangered Puerto Rican Plum Pigeon (*Columba inornata vachoni*). JAMES W. WILEY and BETH P. WILEY. *U.S. Forest Service, Box A.Q., Rio Piedras, Puerto Rico 00928*

Status of efforts to prevent extinction of the Puerto Rican Parrot (*Amazona cinnabara*). NOEL F. R. SNYDER. *U.S. Fish and Wildlife Service, Patuxent Wildlife Research Center, Puerto Rican Field Station, Box 21, Palmer, Puerto Rico 00721*

The distribution, present status, and outlook for the future of the Red-cockaded Woodpecker. JEROME A. JACKSON. *Department of Zoology, Mississippi State University, Mississippi State, MS 39762*

A brief history of oil pollution and its effects on sea bird populations in North America. RALPH E. BARCOCK. *Department of Biology, Western Michigan University, Kalamazoo, MI 49007*

## CONCURRENT SESSION B

*Physiology and Ecology*

Latitudinal variation of the postnuptial molt in White-crowned Sparrows of the Pacific Coast. L. RICHARD MEWALDT and JAMES R. KING. *Avian Biology Laboratory, San Jose State University, San Jose, CA 95192 and Department of Zoology, Washington State University, Pullman, WA 99163*

Influence of photoperiod and temperature on the duration and tempo of postnuptial molt in White-crowned Sparrows (*Zonotrichia leucophrys gambelii*). JOHN D. CHILCOTE. *Department of Zoology, Washington State University, Pullman, WA 99163*

The use of equivalent black-body temperature in assessing heat and cold stress in the field and in predicting metabolic rate in laboratory studies. SHEILA A. MAHONEY AND JAMES R. KING. *Department of Zoology, Washington State University, Pullman, WA 99163*

The energetic advantage of the communal roosting behavior of the Starling (*Sturnus vulgaris*) in a coniferous forest. MICHAEL P. KELTY. *Department of Zoology, The Ohio State University, Columbus, OH 43210*

The effect of low ambient temperature and wind on the bioenergetics of the winter acclimatized Carolina Chickadee. LARRY P. MAYER AND BRIAN J. BATESBY. *Department of Zoology, The Ohio State University, Columbus, OH 43210*

Basal metabolic rate in growing chicks. WAYNE J. KUENZEL. *Department of Poultry Science, University of Maryland, College Park, MD 20742*

The energetics of young Japanese Quail (*Coturnix coturnix japonica*). C. R. BLEM. *Department of Biology, Virginia Commonwealth University, Richmond, VA 23284*

Mobilization of lipid by glucagon in Harris' Sparrows (*Zonotrichia querula*) and House Sparrows (*Passer domesticus*). WILLIAM A. DEGRAW AND LAURA A. GAUL. *University of Nebraska at Omaha, Omaha, NB 68101*

Adaptive aspects of postnuptial and postjuvinal molt of the Western Meadowlark (*Sturnella neglecta*). ROBERT A. LEWIS. *Corvallis Environmental Research Center, Corvallis, OR 97330*

Wintering Tree Sparrows (*Spizella arborea*). ELLEN D. KETTERSON AND PETER HOBAN. *Department of Biological Sciences, Bowling Green State University, Bowling Green, OH 43403 and Zoology Department, Indiana University, Bloomington, IN 47401*

A model for estimating population sex ratios in Field Sparrows through wing length measurements. DAVID L. PARKER AND C. MORRISON-PARKER. *Department of Mathematical Sciences, Salisbury State College, Salisbury, MD 21801 and Department of Zoology, Indiana University, Bloomington, IN 47401*

Structure of winter avifaunas at three temperate latitudes. ELLIOT J. TRAMER. *Department of Biology, University of Toledo, Toledo, OH 43606*

## THURSDAY MORNING PAPERS SESSIONS

## CONCURRENT SESSION A

## Behavior

Ecology, sexual selection, and the evolution of mating systems—I. STEPHEN T. EMLEN AND LEWIS W. ORING. *Division of Biological Sciences, Cornell University, Ithaca, NY 14853 and Department of Biology, University of North Dakota, Grand Forks, ND 58201*

Inhibition, population genetics and the adaptiveness of territoriality. STEPHEN I. ROTHSTEIN. *Department of Biological Sciences, University of California, Santa Barbara, CA 93106*

Assertiveness of female Mountain Chickadees toward their mates early in courtship. KEITH L. DIXON. *Department of Biology, Utah State University, Logan, UT 84322*

Contributions to nesting by Florida Scrub Jay helpers. JERRE A. STALLCUP AND GLEN E. WOLFFENDEN. *Department of Biology, University of South Florida, Tampa, FL 33620*

Parental care in a lapwing species (*Vanellus crassirostris*). JEFFREY WALTERS. *Allee Lab of Animal Behavior, University of Chicago, Chicago, IL 60637*

Aspects of social behavior in the Monk Parakeet. PETER J. ALEXANDRO. *Ecology Program, Rutgers, The State University of New Jersey, New Brunswick, NJ 08903*

Behavioural interactions of two *Thryothorus* wren species. R. NEIL BROWN. *Department of Biology, McGill University, Montreal, Quebec, Canada H3C 3C1*

'Message' analysis of the choking display of the Western Gull (*Larus occidentalis*). JUDITH L. HAND. *Department of Biology, University of California, Los Angeles, CA 90024*

Individual auditory recognition in the Least Tern (*Sterna albifrons*). LYNN J. MOSLEY. *Department of Zoology, University of North Carolina, Chapel Hill, NC 27514 and Department of Biology, Elon College, Burlington, NC 27244*

Recognition of neighbors' duets by Stripe-backed Wrens (*Campylorhynchus nuchalis*). R. HAVEN WILEY AND MINNA S. WILEY. *Department of Zoology, University of North Carolina, Chapel Hill, NC 27514*

Cultural ornithology: House Finch dialects used to deduce dispersal patterns. PAUL C. MUNDINGER. *Biology Department, Queens College CUNY, Flushing, NY 11367*

Experimental investigations of the vocal behavior of the Field-Sparrow (*Spizella pusilla*). C. MORRISON-PARKER. *Department of Zoology, Indiana University, Bloomington, IN 47401*

## CONCURRENT SESSION B

## Ecology

Intrapopulation variation in the territory size of Cardinals (*Cardinalis cardinalis*). BRADLEY M. GOTTFRIED. *Department of Zoology, Miami University, Oxford, OH 45056*

Breeding and winter ecology of four western wood warblers. RICHARD L. HUTTO. *Department of Biology, University of California, Los Angeles, CA 90024*

Ecological correlates of rarity in a tropical forest bird community. JAMES R. KARR. *Department of Ecology, Ethology, and Evolution, University of Illinois, Champaign, IL 61820*

Seed storage and recovery strategies of the Clark's Nutcracker in the eastern Sierra Nevada. DIANA F. TOMBACK. *Department of Biological Sciences, University of California, Santa Barbara, CA 93106*

Ecology, sexual selection, and the evolution of mating systems—II. LEWIS W. ORING AND STEPHEN T. EMLEN. *Department of Biology, University of North Dakota, Grand Forks, ND 58201 and Division of Biological Sciences, Cornell University, Ithaca, NY 14853*

Total frugivory in tropical birds: a reappraisal. MERCEDES S. FOSTER. *Museum of Vertebrate Zoology, University of California, Berkeley, CA 94720*

Avian-primate feeding associations. ORREY P. YOUNG. *Department of Zoology, University of Maryland, College Park, MD 20742*

Comparative foraging behavior of the Traill's Flycatcher complex (*Empidonax* sp.). JON C. BARLOW AND W. BRUCE MCGILLIVRAY. *Department of Ornithology, Royal Ontario Museum, 100 Queen's Park and Department of Zoology, University of Toronto, Toronto, Ontario*

Foraging patch utilization in oldfield nesting Red-winged Blackbirds. DONALD L. BEAVER. *Department of Zoology, Michigan State University, East Lansing, MI 48824*

Black-bellied Whistling Duck utilization of a rice culture habitat. GONFREY R. BOURNE. *IES, Miami University, Oxford, OH 45056*

Feeding ecology of the endangered Siberian White Crane (*Grus leucogeranus*) on its wintering grounds at Keoladeo Ghana Sanctuary, Bharatpur, India. PAUL SPITZER. *Laboratory of Ornithology, Section of Ecology and Systematics, Cornell University, Ithaca, NY 14853*

An initial assessment of winter resource utilization by blackbird and starling populations in Kentucky and Tennessee. M. I. DYER. *Natural Resource Ecology Laboratory and Department of Fishery and Wildlife Biology, Colorado State University, Fort Collins, CO 80523*

## THURSDAY AFTERNOON PAPERS SESSIONS

## CONCURRENT SESSION A

## Ecology

Spatial relationships and habitat partitioning by breeding raptors in central Utah. DWIGHT G. SMITH AND JOSEPH R. MURPHY. *Department of Biology, Southern Connecticut State College, New Haven, CT 06515 and Department of Zoology, Brigham Young University, Provo, UT 84602*

Brood size reduction of Ospreys (*Pandion haliaetus*) on Gardiners Island, New York. ALAN POOLE AND PAUL SPITZER. *School of Forestry, Yale University, New Haven, CT 06520 and Laboratory of Ornithology, Section of Ecology and Systematics, Cornell University, Ithaca, NY 14853*

Effects of weather, brood size, and age of chicks on time-use by male Ospreys (*Pandion haliaetus*) in southeastern Virginia. CHRISTOPHER H. STINSON. *Department of Biology, College of William and Mary, Williamsburg, VA 23185*

Some vocalizations of *Asio otus*, *A. flammeus* and *A. stygius*. GEORGE B. REYNARD, ANNABELLE DOD AND DONALD D. DOD. *105 Midway, Riverior, NJ 08077 and P.O. Box 1053, Santo Domingo, Dominican Republic*

Turkey Vultures (*Cathartes aura*) and live prey. IRVINE D. PRATHER AND RICHARD N. CONNER. *Department of Biology, Virginia Polytechnic Institute and State University, Blacksburg, VA 24060*

## CONCURRENT SESSION B

## Breeding Biology

A theory of clutch size in nidicolous birds. ROBERT E. RICKLEFS. *Department of Biology, University of Pennsylvania, Philadelphia, PA 19174*

Growth strategies in nestling birds. RAYMOND J. O'CONNOR. *Department of Zoology, University College of North Wales, Bangor, United Kingdom*

Nonbreeding in Alaskan Glaucous Gulls. CARL A. STRANG. *Department of Forestry and Natural Resources, Purdue University, Lafayette, IN 47907*

Hatch order and fledging success of Laughing Gull chicks. C. HAHN. *I.A.B., Rutgers University, Newark, NJ 07102*

Temporary breeding populations in the polyandrous American Jacana (*Jacana spinosa*). DONALD A. JENNI. *Department of Zoology, University of Montana, Missoula, MT 59801*

Pair bond fidelity and its relationship to nest excavation in the Williamson Sapsucker (*Sphyrapicus thyroideus*). ALLEN B. CROCKETT. *Genge Environmental Consultants, 570 West 44th Avenue, Denver, CO 80216*

Health and environmental impact of Kentucky blackbird roosts. BURT L. MONROE, JR. AND LOIS S. CRONHOLM. *Department of Biology, University of Louisville, Louisville, KY 40208*

A comparative analysis of differing population trends between two tattle-feeding wading birds, Roseate Spoonbill (*Ajaja ajaja*) and Wood Stork (*Mycteria americana*), on the southeastern coastal plain. JOES C. OGDEN. *National Audubon Research Department, 115 Indian Mound Trail, Tavernier, FL 33070*

Analysis of the use of the point-center quarter method in estimating colonial seabird nesting populations. ROBERT F. SOOTS, JR. AND JAMES F. PARNELL. *Department of Biology, Campbell College, Bate's Creek, NC 27506 and Department of Biology, The University of North Carolina at Wilmington, Wilmington, NC 28401*

Survey of Atlantic coast heron colonies, 1975. THOMAS W. CUSTER AND RONALD C. OSBORN. *U.S. Fish and Wildlife Service, Patuxent Wildlife Research Center, Laurel, MD 20811*

Changing abundance patterns of the Ring-necked Pheasant, 1962-1971. CARL E. BOCK AND LARRY W. LEPTHEN. *Department of Environmental, Population, and Organismic Biology, University of Colorado, Boulder, CO 80302*

The extension of the known range of the Least Pauraque (*Siphonorhis brewsteri*). ANNABELLE STOCKTON DE DOD. *Department of Ornithology, Museo Nacional de Historia Natural, Plaza de la Cultura, Calle César Nicolás Penson, Santo Domingo, Dominican Republic*

Nesting success as a factor in the expansion of Glossy Ibis (*Plegadis falcinellus*). LYNNE M. MILLER. *Biology Department, Livingston-Rutgers University, New Brunswick, NJ 08903*

Survival, mortality and reproductive life-span of known-age Adelle and Yellow-eyed Penguins. DAVID G. AINLEY. *Point Reyes Bird Observatory, Bolinas, CA 94924*

Breeding biology of the Great Egret (*Casmerodius albus*). DOUGLAS GLADSTONE. *Biology Department, Livingston-Rutgers University, New Brunswick, NJ 08903*

Nesting behavior of Wood Ducks (*Aix sponsa*) in New Jersey. STEPHEN J. ZAPKO. *Department of Zoology, Rutgers University, Newark, NJ 07102*

Mortality, emigration and separation of mated Lesser Snow Geese (*Chen caerulescens caerulescens*). FRED COOKE. *Department of Biology, Queen's University, Kingston, Ontario, Canada*

Selection and clutch size in the Starling. KENNETH ALAN CROSSNER. *Department of Zoology, Rutgers University, New Brunswick, NJ 08903*

### SPECIAL EVENTS AND EXHIBITS

The Committee on Public Responsibilities held a well-attended discussion session on Blackbird Problems Tuesday evening. The consensus of the meeting was that the Department of the Interior should convene a meeting of representatives of all groups interested in the problem and its control in order to formulate a scientific approach. (See Resolution 3, page 131).

The 25 delegates to a "Workshop on a National Plan for Ornithology," sponsored by the A.O.U. and funded by the National Science Foundation, convened in their first plenary session Friday. See *Auk* 93: 413, 1976, for a description of the composition and objectives of the Workshop.

Motion picture sessions on Tuesday and Wednesday evenings featured the following films: "The Arctic Islands, a Matter of Time," DAVID N. NETTLESHIP, *Canadian Wildlife Service, Ottawa, Ontario*; "A Robin Spring," JEFFERY R. BOURNE, *Cincinnati, Ohio*; "Fernandina Day," SALLY J. CLONINGER, *Temple University, Philadelphia, Pennsylvania*; "Eastern Birds for the Millions," DONALD S. HEINTZELMAN, *Allentown, Pennsylvania*.

Casts of *Archaeopteryx* and other fossil birds, illustrating material discussed by John H. Ostrom in the Wednesday morning symposium on "The Ancestors and Origins of Birds," were displayed in the Sunken Lounge of the Dining Center. Also on exhibit in or around the Sunken Lounge were early prints of man's use of birds featuring ancient techniques for bird catching, some of Guy Tudor's original paintings for the plates of the forthcoming "Birds of Venezuela" by R. Meyer de Schauensee and W. H. Phelps, Jr., and displays illustrating the Nest Program and Colonial Breeding Bird Census projects of the Cornell Laboratory of Ornithology.

A poster display, also in the Sunken Lounge area, on "DNA Hybridization: A Molecular Approach to the Classification of Birds" illustrated Charles G. Sibley's invited lecture and provided an excellent model for poster sessions of future meetings, which hopefully will ease the crowded schedules of contributed papers in concurrent sessions.

### SOCIAL EVENTS AND TOURS

The Council and Fellows held their symposium and dinner on Monday evening in the Bryn Mawr Room of the Dining Center. An innovation this year was the participation of spouses. Members attended informal receptions and social hours in the Sunken Lounge and Verandas of the Dining Center on Monday, Tuesday, and Wednesday afternoons and evenings, capped by a barbecue on the Veranda Wednesday evening.

Associate members participated in a walking tour of the bicentennial and other historical attractions of downtown Philadelphia on Tuesday and visited the antique collections and gardens of Winterthur near Wilmington on Wednesday.

The annual banquet of the A.O.U. was preceded by a reception hosted by the Delaware Museum of Natural History in Greenville, Delaware. The dramatic exhibits of birds and mollusks and the spacious study areas and library of the Museum were open during the reception. The banquet itself was held at the DuPont Country Club in Wilmington. There was no formal organized program, but President John T. Emlen presented awards and spoke briefly about the active committee work of the A.O.U.

#### FIELD TRIPS

On Friday morning 23 persons participated in a field trip to Bombay Hook National Wildlife Refuge where the highlights of the trip were sightings of American Avocet, Black-necked Stilt, Upland Plover, Stilt Sandpiper, Gull-billed Tern, Shelduck, Blue Grosbeak, Short-billed Marsh Wren, and two immature Bald Eagles. In the afternoon 45 persons visited Brigantine National Wildlife Refuge where in addition to waterfowl they saw migratory shorebirds including a Hudsonian Godwit. Later they spent the evening watching herons, featuring a Yellow-crowned Night Heron, returning to the rookery at Stone Harbor, New Jersey.

#### RESOLUTIONS

Resolutions concerning the protection of forests in the Darien area of Panama, the protection of wilderness and fauna in Puerto Rico, the control of large blackbird roosts, falconry and the conservation of raptors, cooperation between U.S. and Mexico on the conservation of Mexican fauna, commendation of the Union Camp Corporation for its donation of landholdings as forest and wildlife preserves, commendation of the President of Costa Rica for creating a national park, and appreciation of arrangements for the Ninety-fourth Stated Meeting were adopted at the general session held Thursday afternoon, 13 August 1976. The specific resolutions were as follows:

##### RESOLUTION 1. **Protection of Forests in the Darien, Panama**

WHEREAS, the United States has provided substantial funding for a highway through eastern Darien, Panama, to connect with the Pan-American Highway in Colombia and additional funds will need to be appropriated for its completion; and  
 RECOGNIZING that the Darien region is still heavily forested and is remarkable for endemic birds, other animals and plants; and further  
 RECOGNIZING that the forest cover has been the main obstacle to the spread into the continent of North America of the foot-and-mouth disease (aftosa), the most economically destructive disease of hoofed animals; and  
 WHEREAS, the destruction of the forest by settlers, which invariably accompanies road construction in tropical America, will result in the loss of an area of great biological interest to humanity and the probable extirpation of many endemic species, and will facilitate the spread of aftosa throughout Middle America and into the United States with enormous economic loss,  
 THEREFORE, the American Ornithologists' Union urges that no further funds of the United States be expended or appropriated for the Darien Gap Highway without adequate assurance that Panama will establish promptly and maintain guarded forest preserves and parks along the entire Colombian border in substantial accordance with existing proposals of the Panamanian government authorities.

##### RESOLUTION 2. **Protection of Wilderness and Fauna in Puerto Rico**

WHEREAS, Puerto Rico and its offlying islands maintain exceptional wildlife resources including many endemic bird species, some of which are endangered or threatened; and  
 WHEREAS, the Government of the Commonwealth of Puerto Rico has established an extensive system of Commonwealth Forests within which are found representative tracts of all major habitats of significance to its wildlife; and  
 WHEREAS, the United States Government maintains jurisdiction over several offlying islands containing important seabird resources which require for their preservation continued surveillance or management,



THEREFORE, the American Ornithologists' Union urges the Government of the Commonwealth of Puerto Rico to extend more stringent legal protection to its Commonwealth Forests by preventing withdrawals from the Forest System of land significant to wildlife, and also urges the U.S. Department of the Interior to accept jurisdiction over and to create national parks, national wildlife refuges or other appropriate reserves on Mona, Monito, federally owned portions of Culebra and nearby offshore islets, and Desecheo.

#### RESOLUTION 3. **The Blackbird Roosting Problem**

WHEREAS, large roosting aggregations of blackbirds are often cited as a hazard to agriculture, aircraft, or human health; and

WHEREAS, some aspects of the problem have been exaggerated in published statements; and

WHEREAS, there is insufficient information available for determining either the extent of the problems attributed to roosting blackbirds or the effects of blackbird control measures; and

WHEREAS, attempts to reduce the numbers of birds in roosts by the application of chemicals and wetting agents seldom result in more than temporary alleviation of the problem,

THEREFORE BE IT RESOLVED, that the American Ornithologists' Union strongly urges the Department of the Interior and the U.S. Fish and Wildlife Service to establish either its own task force, or a task force through the National Research Council, to initiate dialogue among parties representing all facets of the blackbird problem, so that the issues may be clarified and the needs and methods for control reevaluated.

#### RESOLUTION 4. **Falconry and the Conservation of Raptors**

RECOGNIZING that raptors are an important component of the ecosystem through their regulation of populations of other animals, and that many raptors have suffered declines in their own populations through habitat destruction, egg-shell thinning related to pesticides, and illegal hunting; and

WHEREAS, the latest federal falconry permit regulations (Federal Register, vol. 41, no. 10, January 15, 1976) set forth conditions under which all species of hawk (Accipitridae) and falcon (Falconidae), and the Great Horned Owl (Strigidae) may be taken for falconry, excepting only those protected under the Endangered Species Act of 1973; and further

RECOGNIZING that each state may impose its own more restrictive falconry regulations,

THEREFORE BE IT RESOLVED that the American Ornithologists' Union urges each state to develop a research program on the populations of its raptors as a basis for formulating falconry regulations that are consistent with the maintenance of healthy raptor populations.

#### RESOLUTION 5. **Cooperation Between the United States and Mexico on the Conservation of Mexican Fauna**

WHEREAS, recent negotiations between the U.S. Fish and Wildlife Service and the Fauna Silvestre of Mexico have led to the formation of the United States-Mexico Committee for the Conservation of Wildlife; and

WHEREAS, the Committee is developing and executing plans for joint research efforts between Mexican and American biologists for the purpose of determining the status of Mexico's fauna and identifying endangered and threatened taxa, with one ultimate goal being the conservation and management of these forms,

THEREFORE BE IT RESOLVED, that the American Ornithologists' Union applauds the U.S. Fish and Wildlife Service and the Fauna Silvestre for their cooperation on behalf of the Mexican fauna, presently threatened by many forms of harvest and habitat destruction.

#### RESOLUTION 6. **Commendation to Union Camp Corporation**

WHEREAS, in 1973, Union Camp Corporation, a forest products firm, donated 50,000 acres of the Great Dismal Swamp of Virginia and North Carolina through the Nature Conservancy to the U.S. Department of the Interior's National Wildlife Refuge System; and

WHEREAS, in 1975, Union Camp donated the 1,700 acre Turtle Island, a pristine South Carolina sea island-salt marsh habitat, to the South Carolina Wildlife and Marine Resources Department through the Nature Conservancy; and

WHEREAS, in 1976, the firm donated 3,800 acres of the Chowan Swamp in North Carolina through the Nature Conservancy to the newly formed American Land Trust; and

WHEREAS, an environmental studies center is being created at the latter site by North Carolina State University and several state agencies; and

WHEREAS, additional such donations are planned for the future through Union Camp's Land Legacy Program,

THEREFORE BE IT RESOLVED THAT, the American Ornithologists' Union commends Union Camp Corporation for these donations as an outstanding example of corporate environmental responsibility.

**RESOLUTION 7. Commendation of President Daniel Oduber of Costa Rica for Creating a National Park on the Osa Peninsula**

WHEREAS, the Corcovado Basin on the Osa Peninsula in Costa Rica is one of the biologically richest and most visually impressive tropical rain forest areas still unaffected by human settlement in Costa Rica; and

WHEREAS, this area has been repeatedly threatened by agricultural and industrial development as well as unregulated hunting of wild birds, mammals, and reptiles; and

WHEREAS, the uniqueness of the Corcovado Basin has been recently recognized through its designation as a national park, the Parque Nacional Corcovado,

THEREFORE, BE IT RESOLVED THAT, the American Ornithologists' Union commends President Daniel Oduber of Costa Rica for his vision and courage in creating the Parque Nacional Corcovado on the Osa Peninsula in Costa Rica.

COUNCIL OF THE AMERICAN ORNITHOLOGISTS' UNION FOR 1976-1977

OFFICERS

Wesley E. Lanyon, *President*  
 Harrison B. Tordoff, *President-elect*  
 Brina Kessel, *Vice-President*  
 George E. Watson, *Secretary*  
 Joel L. Cracraft, *Treasurer*

ELECTIVE COUNCILORS

Eugene Eisenmann .....	1977	Glen E. Woolfenden.....	1978
Burt L. Monroe .....	1977	Richard T. Holmes .....	1979
Kenneth C. Parkes .....	1977	Joseph R. Jehl, Jr. ....	1979
Thomas R. Howell .....	1978	Richard L. Zusi' .....	1979
Ned K. Johnson .....	1978		

ADDITIONAL MEMBERS OF THE COUNCIL

Oliver L. Austin, Jr., *Editor of The Auk*  
 John William Hardy, *Editor of Ornithological Monographs*

PAST PRESIDENTS

Alexander Wetmore, 1926-29—Honorary President

Herbert Friedmann 1937-39	Harold F. Mayfield, 1966-68
Hoyes Lloyd, 1945-48	John W. Aldrich, 1968-70
Ernst Mayr, 1957-59	Robert W. Storer, 1970-72
George H. Lowery, 1959-62	Joseph J. Hickey, 1972-73
Austin L. Rand, 1962-64	Donald S. Farner, 1973-75
Dean Amadon, 1964-66	John T. Emlen, 1975-76

A.O.U. COMMITTEES 1976-77

INVESTING TRUSTEES: Melvin A. Traylor, Jr., *Chairman*. Cyrus Mark, James R. Ware.

COMMITTEE ON ARCHIVES: Gorman M. Bond, *Chairman*. Dean Amadon, Elizabeth S. Austin, Roger B. Clapp.

- COMMITTEE ON BIOGRAPHY: Helen Hays, *Chairman*. Charles H. Blake, Mary M. Erickson, George A. Hall, C. Stuart Houston.
- COMMITTEE ON BIRD COLLECTIONS: Mary H. Clench, *Chairman*. Jon C. Barlow, Robert W. Dickerman, James L. Gullledge, Joseph R. Jehl, Jr., Ned K. Johnson, Marion Anne Jenkinson, François Vuilleumier, Richard L. Zusi.
- COMMITTEE ON BREWSTER AND COUES AWARDS: François Vuilleumier, *Chairman*. Stephen T. Emlen, Kenneth C. Parkes, Robert J. Raikow, George C. West.
- COMMITTEE ON BYLAWS CHANGES: Kenneth C. Parkes, *Chairman*. Lester L. Short, Harrison B. Tordoff.
- COMMITTEE FOR A.O.U. CENTENNIAL: Walter Bock, *Chairman*. Richard C. Banks, Alan H. Brush, George A. Clark, Jr., Donald S. Farner, Frank B. Gill, James R. Karr, James R. King, Gordon H. Orians, Lester L. Short, Kier B. Sterling.
- COMMITTEE ON CLASSIFICATION OF NOMENCLATURE: Eugene Eisenmann, *Chairman*. Kenneth C. Parkes, *Vice-chairman*; Lester L. Short, *Secretary*; Richard C. Banks, Thomas R. Howell, Ned K. Johnson, George H. Lowery, Jr., Burt L. Monroe, Jr., Robert W. Storer.
- COMMITTEE ON CONSERVATION: Warren B. King, *Chairman*. Jerome A. Jackson, Herbert W. Kale II, Harold F. Mayfield, Richard L. Plunkett, Jr., J. Michael Scott, Paul F. Springer, Stanley A. Temple, Sanford R. Wilbur.
- COMMITTEE ON FINANCE: Joel L. Cracraft, *Chairman*. Cyrus Mark, Burt L. Monroe, Jr., Melvin A. Traylor, Jr., George E. Watson, John A. Wiens.
- COMMITTEE ON FOREIGN TRANSLATIONS: Helmut C. Mueller, *Chairman*. Dale M. Arvey, Victor Dolnik, Robert S. Hoffman, Sergej Postupalsky, M. D. F. Udvardy, George E. Watson.
- COMMITTEE ON LOCAL ARRANGEMENTS: Ned K. Johnson, *Chairman*. Laurence C. Binford, Jane P. Church, Gene M. Christman, John H. Davis, Mercedes S. Foster, Anne D. Jacobberger, Carla B. Johnson, Frank A. Pitelka, Jennifer M. White.
- COMMITTEE ON MEMBERSHIP: Laurence C. Binford, *Chairman*. Kenneth P. Able, Robert F. Andrie, Lawrence G. Balch, Jon C. Barlow, Delwyn G. Berrett, Charles T. Collins, David A. Easterla, Charles D. Fisher, Sidney A. Gauthreaux, C. Stuart Houston, Horace H. Jeter, Douglass H. Morse, David M. Niles, Dennis R. Paulson, Robert W. Smart, Jerry B. Strickling, Paul W. Sykes, Harriet P. Thomas, Charles H. Trost, Roland H. Wauer, John L. Zimmerman.
- COMMITTEE ON NOMINATION OF ELECTIVE MEMBERS AND FELLOWS: Joseph R. Jehl, Jr., *Chairman*. Richard T. Holmes, Val Nolan, Jr.
- COMMITTEE ON NOMINATION OF CORRESPONDING AND HONORARY FELLOWS: Donald S. Farner, *Chairman*. Walter Bock, J. Allen Keast.
- COMMITTEE ON SCIENTIFIC PROGRAM: James R. King, *Chairman*. Donald A. Jenni, Ned K. Johnson, Frank A. Pitelka.
- COMMITTEE ON PUBLIC RESPONSIBILITIES: Richard C. Banks, *Chairman*. David G. Ainley, Joel L. Cracraft, Fred G. Evenden, David B. Marshall, Judith W. McIntyre, Richard L. Plunkett, Jr., William B. Robertson, Jr., Jared Verner.
- COMMITTEE ON RESEARCH AWARDS: L. Richard Mewaldt, *Chairman*. Carl E. Bock, Joanna Burger, Mary F. Willson.
- COMMITTEE ON RESOLUTIONS: Marshall A. Howe, *Chairman*. Roger B. Clapp, Michael J. Hamas, Eugene S. Morton, Warren B. King.
- COMMITTEE ON SCIENTIFIC AND EDUCATIONAL USES OF WILD BIRDS: John W. Aldrich, *Chairman*. Jon C. Barlow, Robert W. Dickerman, Ned K. Johnson, Brina Kessel, Oscar T. Owre, Ralph J. Raitt.
- COMMITTEE ON STUDENT AWARDS: Sidney A. Gauthreaux and Lewis W. Oring, *Cochairmen*. Kenneth P. Able, David A. Boag, Donald A. Jenni, James R. Karr, Ralph J. Raitt.
- CONVENERS OF WORKSHOP ON A NATIONAL PLAN FOR ORNITHOLOGY: Walter Bock, James R. King.
- REPRESENTATIVE ON A.A.A.S. COUNCIL: M. D. F. Udvardy, Representative to Section Biological Sciences.
- OBSERVER TO A.I.B.S. GOVERNING BOARD: George E. Watson.
- REPRESENTATIVES TO U.S. SECTION I.C.B.P.: James C. Greenway, Jr., David B. Marshall.
- REPRESENTATIVE TO NATIONAL RESEARCH COUNCIL: George E. Watson, Representative to Assembly of Life Sciences.
- REPRESENTATIVE TO ASSOCIATION OF SYSTEMATICS COLLECTIONS: Mary H. Clench.

## TREASURER'S REPORT

(1 AUGUST 1975–31 JULY 1976)

### INCOME TO ACTIVE FUND

Dues.....	\$35,788.11	
Subscriptions.....	17,506.18	
Sale of Back Issues of THE AUK.....	945.55	
Royalties.....	540.21	
Advertising.....	2,097.01	
Use of Mailing List.....	1,080.00	
Donations to Active Fund.....	1,980.91	
Sale of Reprints.....	261.25	
Income from General Endowment.....	10,223.27	
Income from Ruthven Deane Fund.....	347.00	
Income from Surplus.....	<u>3,267.21</u>	
TOTAL INCOME.....	\$74,036.70	
Balance in account, 31 July 1975.....	<u>14,525.61</u>	
TOTAL.....		\$88,562.31

### DISBURSEMENTS FROM ACTIVE FUND

Expenses, publication of THE AUK.....	\$54,028.02	
Expenses, President.....	88.74	
Expenses, Secretary.....	1,683.48	
Expenses, Treasurer.....	5,603.19	
Cost of Dues Notices.....	1,491.38	
Cost of Annual Meetings.....	2,141.08	
Mailing back issues of THE AUK.....	235.20	
Cost of Reprints.....	145.85	
Donations from Active Fund.....	510.25	
Reprinting 1975 issues of THE AUK.....	2,653.53	
Expenses, Advertising & Mailing List.....	804.23	
Expenses, Membership Committee.....	279.98	
Expenses, Scientific Collecting Committee.....	66.73	
Expenses, Conservation Committee.....	512.00	
Expenses, Wetmore Fund establishment.....	879.05	
Expenses, Coues Award.....	<u>550.00</u>	
TOTAL DISBURSEMENTS.....	\$71,672.71	<u>\$71,672.71</u>
Balance in Active Fund, 1 August 1976.....		<u>\$16,889.60</u>

### SPECIAL FUNDS

#### *Brewster Memorial Fund:*

Balance Forward.....	\$ 0.00	
Income from investments.....	603.15	
Expenses of producing medal.....		\$ 159.95
Award (Haffer).....		<u>443.20</u>
	\$ 603.15	\$ 603.15

#### *Bird Protection Fund:*

Balance Forward.....	\$ 0.00
Income from investments.....	108.52

Donation, ICBP .....		\$	100.00
Balance in account .....			<u>8.52</u>
	\$	108.52	\$ 108.52
<i>Educational Fund:</i>			
Balance Forward .....	\$	155.17	
Income from investments .....		301.57	
Donation, 1975 Local Committee .....		100.00	
Student Paper Award, 1975: Douglas W. Mock .....			\$ 150.00
Memberships for 38 students .....			304.00
Balance in account .....			<u>102.74</u>
	\$	556.74	\$ 556.74
<i>General Endowment Fund:</i>			
Balance Forward .....	\$	2,686.27	
W. H. Pugh (Patron) .....		1,000.00	
Life Membership Payments .....		8,178.00	
Donations: John W. Aldrich .....		100.00	
Robert T. Vanderbilt .....		100.00	
William H. Pugh .....		200.00	
Eric Cutler .....		200.00	
Alexander Wetmore .....		500.00	
Others .....		325.00	
Check charges .....			\$ 215.56
To Investing Trustees .....			10,000.00
Balance in account .....			<u>3,073.71</u>
	\$13,289.27		\$13,289.27
<i>Handbook of North American Birds Fund:</i>			
Balance Forward .....	\$	45.91	
Balance in account .....			<u>\$ 45.91</u>
	\$	45.91	\$ 45.91
<i>Special Publications Fund:</i>			
Balance Forward .....	\$10,201.51		
Income from investments .....		387.38	
Sale of Checklists .....		2,672.20	
Sale of Proceedings .....		190.00	
Sale of Indexes .....		454.00	
Storage and Mailing .....			\$ 200.32
Balance in account .....			<u>13,704.77</u>
	\$13,905.09		\$13,905.09
<i>Ornithological Monographs Fund:</i>			
Balance Forward .....	\$27,067.23		
Sale of Monographs .....		6,197.55	
Donation from Tucker Foundation .....		5,000.00	
Publication expenses, Monograph #18 .....			\$ 2,809.37
Publication expenses, Monograph #19 .....			4,867.92
Publication expenses, Monograph #20 .....			4,692.01
Editorial expenses (Hardy) .....			193.03
Postage (Woolfenden) .....			300.00
Secretarial salary .....			3,599.00
Copyrights .....			24.00
Balance in account .....			<u>21,779.45</u>
	\$38,264.78		\$38,264.78

*Marcia B. Tucker Fund:*

Donation, Tucker Foundation .....	\$	500.00	
Transfer from Active Fund .....		134.00	
1976 Awards:			
Christopher H. Stinson .....	\$	78.00	
Jerre A. Stallcup .....		176.00	
Diana G. Matthiesen .....		380.00	
	\$	634.00	\$ 634.00

*Josselyn Van Tyne Memorial Fund:*

Balance Forward .....	\$	10.06	
Income from investments .....		647.31	
Donation, 1975 Local Committee .....		300.00	
1976 Grants:			
Susan Hannon .....	\$	200.00	
Victor Krauthamer .....		265.00	
James A. Rodgers .....		185.00	
Dan G. Busby and J. Paul Goossen .....		305.00	
Balance in account .....		2.37	
	\$	957.37	\$ 957.37

*Alexander Wetmore Fund:*

Donations: John W. Aldrich .....	\$	100.00	
Oliver L. Austin, Jr. ....		500.00	
Paul E. Belcher .....		100.00	
Andrew J. Berger .....		100.00	
Herbert E. Carnes .....		100.00	
Liscum Diven .....		100.00	
John S. Dunning .....		100.00	
Karen Eastman .....		100.00	
Frank B. Gill .....		100.00	
Ed. N. Harrison .....		100.00	
E. W. Mudge, Jr. ....		100.00	
Kenneth C. Parkes .....		100.00	
Roger T. Peterson .....		100.00	
F. W. Preston .....		100.00	
C. John Ralph .....		100.00	
C. S. Robbins .....		146.74	
Doris H. Speirs .....		100.00	
Melvin A. Traylor, Jr. ....		250.00	
Rodman Ward .....		100.00	
Other donations .....		2,694.00	
Balance in account .....			\$ 5,190.74
	\$	5,190.74	\$ 5,190.74

## EXPENSE BREAKDOWN

*AUK Publication:*

## Production Costs:

October 1975 issue .....	\$11,139.46	
January 1976 issue .....	10,864.77	
April 1976 issue .....	10,607.44	
July 1976 issue .....	13,322.08	
Copyrights .....	18.00	
Page charge payments .....		\$ 3,707.10
· Total Production Costs .....		\$42,244.65

## Editorial Expenses:

Secretarial salary .....	\$ 5,658.51
Honorarium .....	2,000.00
Typewriter costs .....	673.00
Postage, etc. ....	<u>657.43</u>
<i>Total Editorial Expenses</i> .....	\$ 8,988.94
AUK Maintenance (Allen Press) .....	<u>\$ 2,794.43</u>
TOTAL PUBLICATION COSTS .....	\$54,028.02

## Treasurer's Expenses:

Secretarial salary .....	\$ 3,565.00
Postage .....	481.55
Telephone, Xerox .....	89.70
Office supplies .....	837.45
General stationery .....	269.71
Bank charges .....	15.52
Miscellaneous .....	<u>344.26</u>
TOTAL TREASURER'S EXPENSES .....	\$ 5,603.19

## CLOSING BALANCES

Active Fund .....	\$16,889.60
Brewster Memorial Fund .....	-0-
Bird Protection Fund .....	8.52
Educational Fund .....	102.74
General Endowment Fund .....	3,073.71
Handbook of North American Birds Fund .....	45.91
Special Publications Fund .....	13,704.77
Ornithological Monographs Fund .....	21,779.45
Marcia B. Tucker Fund .....	-0-
Josselyn Van Tyne Memorial Fund .....	2.37
Alexander Wetmore Fund .....	<u>5,190.74</u>
TOTAL .....	<u>\$60,797.81</u>
Checking Account, Corvallis, Oregon .....	\$ 3,139.65
Uninvested Cash, Chicago .....	1,658.16
Variable Demand Notes, Chicago .....	<u>56,000.00</u>
TOTAL .....	<u>\$60,797.81</u>

JOHN A. WEINS, *Treasurer*

## BREWSTER AWARD 1976

## GORDON H. ORIANS

The last two decades have witnessed a synthesis of thinking and research in evolutionary ecology—a blend of genetics, ecology, and population biology. The impetus for much of this development has come from studies on birds, particularly by David Lack and Robert MacArthur. It is fitting that the Brewster Award be made this year to the third major figure in studies on the evolutionary ecology of birds, Gordon H. Orians.

Dr. Orians' primary contributions have been in the areas of social organization and mating systems. His thesis on the ecology of blackbird social systems, published in 1961, established him as an innovative ornithologist equally at home with new concepts and field research. Subsequent papers have set the stage for future work on territoriality, the evolution of mating systems, and population approaches to behavioral ecology. Perhaps his greatest contribution has been, like that of Lack and MacArthur, to focus our attention on the population and genetic consequences of behavioral systems and to lead us in interpreting behavior patterns as adaptations to the environment.

Beyond his contributions through original research, Dr. Orians has been an articulate spokesman for his point of view. He has directed the dissertation research of many notable young ecologists and behavioral biologists at the University of Washington and has introduced hundreds of others to ecology through undergraduate and graduate courses there and at the Organization for Tropical Studies. In both his research and his teaching, Dr. Orians has provided a model for aspiring ornithologists, ecologists, and ethologists. In view of these achievements the American Ornithologists' Union confers the Brewster Medal for 1976 on Dr. Gordon H. Orians.





## ELLIOTT COUES AWARD 1976

## PETER R. MARLER

The heuristic value of the "dialect" concept in avian song is evidenced today by the scope and number of field and laboratory investigations it has generated. Quantitative descriptions of the magnitude and patterns of geographic variation in song characteristics have been published on numerous species. The hypothesis that dialects provide a basis for partial isolation of gene pools and hence for incipient speciation has led to investigation of ecological and generic correlates with dialects, dialect boundaries as barriers to dispersal, field and laboratory playback experiments with both male and female subjects to determine their ability to discriminate dialects as a function of their native dialect, and Kasper Hauser studies of dialect development among naive subjects. Alternate hypotheses offered to explain the origins of dialects, in particular one relating to the role of songs in male/female social interaction promise to stimulate research into habitat selection, dominance status, and pairing success in relation to song parameters and countersinging behavior among males. In short, the dialect question is at the core of a web of problems involving ecology, behavior, and evolution.

Although he did not originate the dialect concept Dr. Peter Marler's many publications and those of his students and colleagues show clearly that he has been the key figure in stimulating multifaceted research on avian dialects. In recognition of this innovative leadership the American Ornithologists' Union confers the Coues Award for 1976 on Dr. Peter R. Marler.

