

SPRING MEETING OF THE TENNESSEE ACADEMY OF SCIENCE

REPORT OF THE SECRETARY

Three sessions were held Friday and Saturday, April 22 and 23, in the ballroom of the Peabody Hotel, Memphis, and one on the evening of April 23 at Walnut Log Lodge, Reelfoot Lake. The attendance at the Memphis sessions varied from forty to more than one hundred. About one hundred and fifty persons were present at the Academy Dinner. President Bliss presided, and a very interesting address on "The Constitution of Living Matter," illustrated with charts and chemical experiments, was delivered by Dr. Martin Fisher, Professor of Physiology, College of Medicine, University of Cincinnati.

The sessions at Memphis were carried out as planned (see the April Journal, page 125) with certain exceptions. A few additional papers were read as follows:

The Application of Physical Methods to Diagnosis in Heart Disease. Neuton S. Stern, University of Tennessee College of Medicine, Memphis.

The Present Conception of Bone Grafting. J. S. Speed, University of Tennessee College of Medicine, Memphis.

What Has Radiation—X-ray and Radium—Therapy Contributed Toward the Control of Cancer? W. S. Lawrence, University of Tennessee College of Medicine, Memphis.

Modern Treatment of Fractures of the Shaft of the Femur. Dr. Henry G. Hill, Memphis.

The Harmony of the Hormones. Dr. J. C. Ayers, Memphis.

Protein in Health and Disease. H. B. Gotten, University of Tennessee College of Medicine, Memphis.

The Effects of Transplants of the Anterior Lobe of the Hypophysis on Pregnant Rats. Cleveland S. Simpkins, University of Tennessee College of Medicine, Memphis.

Opportunities for Ornithological Search about Memphis. Ben B. Coffey, Jr., Memphis.

The Physiology of Respiration in Fishes. E. B. Powers, University of Tennessee, Knoxville. This paper was read by title due to the absence of the author.

The astronomy paper by Latimer J. Wilson was also read by title on account of the absence of the author. Some of the papers at the Reelfoot Lake session were also read by title due to the same cause.

Saturday afternoon the non-resident members were taken in automobiles to Walnut Log Lodge, on Reelfoot Lake, where the fourth session was held that evening. The program consisted of a "Symposium on Reelfoot Lake," with special reference to its suitability as a location for a biological laboratory.

Several papers were devoted to the geographic and geologic features of the lake, its acquisition by the State for a public park and the setting apart by the 1931 General Assembly of two acres and a building

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for a biological station for research, to be under the management and control of the Tennessee Academy of Science, and an appropriation of \$2,500.00 towards outfitting.

Following these, were papers by the State Commissioners of Education, Agriculture, and Public Health on the value of such an institution to the State, and by the President of the Southwestern University on the interest and patronage of colleges and universities.

The remarkable richness of the lake and its environs in forms of vegetable and animal life was brought out by the State Forrester and the State Game and Fish Warden and by Professors Jesse M. Shaver of George Peabody College for Teachers, Clarence E. Moore of the West Tennessee Teachers College and A. John Schwarz of the University of Tennessee.

Dr. A. Richard Bliss, Jr., chairman of the Habilitation Committee, reported that the Cantillon Club House of eight rooms would be ready for use as a laboratory early next summer, the Walnut Log Lodge nearby to be used for residence of workers.

Great interest was manifested in the establishment of the biological station. Encouraging letters were read from Dr. Chancey Juday, biologist of the Wisconsin Geological and Natural History Survey, Director of the Wisconsin Limnological Laboratory, Professor Will Scott, of the University of Indiana, Director of the Indiana University Biological Laboratory, and from the presidents of several colleges and universities in Tennessee endorsing and commending the enterprise.

Dr. Bliss, chairman of the Habilitation Committee, appointed by the Board of Trustees, made a report of the proposed changes in the Cantillon Club House to convert it into a laboratory to be sufficiently equipped early in the summer of this year to supply the needs of a group of workers instituting a biological survey of the lake and its environs.

The following report of a committee on resolutions was read and adopted by a rising vote:

WHEREAS, a meeting of unusual interest and instructive content is about to terminate, we beg leave to report, in behalf of the members of the Academy in attendance, and their guests, a debt of gratitude to the following:

(a) To the Local Committee, as named on the official program and particularly to the energetic chairman, Dr. A. R. Bliss, Jr., for efficient arrangements and conduct of the meeting;

(b) To the press of Memphis for their extensive publicity;

(c) To the management of the Peabody Hotel for adequate service in connection with meetings and dinner;

(d) To the genial hosts of the Walnut Log Lodge for unique service in connection with the fourth session;

(e) To Dr. Martin H. Fischer of the University of Cincinnati for his instructive and interesting address following the dinner of Friday evening;

THEREFORE, be it resolved:

That the Academy present its thanks to each of the above mentioned individuals and organizations for the service they have so efficiently rendered.

At a meeting of the Reelfoot Lake Biological Station Trustees held on the morning of April 24th, an Executive Committee was established consisting of A. Richard Bliss, Jr., chairman, James B. Lackey, Richard G. Turner, Jesse M. Shaver, J. T. McGill, ex-officio, and the following resolution was adopted: "That the Board of Trustees of the Reelfoot Lake Biological Station invites the Tennessee State Departments of Education, Agriculture and Public Health, a number of universities and colleges and selected scientific organizations, each to appoint one or more research workers to take part in a physical and biological survey of Reelfoot Lake and its environs, to begin June 1st, 1932.

Each department or institution may make such provision for expenses as it deems advisable. Reports of the work are to be made to the trustees."

NEW PUBLICATIONS ON OUR SHELVES

JESSE M. SHAVER, EDITOR

GEORGE PEABODY COLLEGE FOR TEACHERS

Proceedings of the American Philosophical Society:

Vol. 65 (1926), No. 1. Address by Hampton L. Carson in Commemoration of I. Minis Hays.

The Present Status of Long-range Weather Forecasting. Robert DeC. Ward.
Further Studies on the Preparation of Metallic Germanium and the Volatility of the Metal in Hydrogen and in Vacuo. John H. Müller, Edwin F. Pike, and A. Kenneth Graham.

The Quantitative Determination of Selenium and Tellurium. Victor Lenber.
The Growth of Functional Neurones and Its Relations to the Development of Behavior. G. E. Coghill.

Mediterranean Garigue and Macchia. John W. Harshberger.
Some Puzzling Pepper Leaves. William Trelease.

Vol. 65 (1926), No. 2. The Last Fifteen Years of Physics. R. A. Millikan.
Samuel Pierpont Langley and Modern Aviation. Charles D. Walcott.
The Transmission of the Vegetative Character in Sphaerocarpos. Charles E. Allen.

The Mechanism of Chemical Reactions. Hugh S. Taylor.

The Flash Spectrum Observed at the 1925 Eclipse. S. A. Mitchell.

The Pleistocene Glacial Stages: Were There More Than Four? Frank Leverett.

The Present Condition of Knowledge on the Composition of Meteorites. George P. Merrill.

Temperature Sensations. Henry C. Bazett.

Nullipore Versus Coral in Reef-Formation. William A. Setchell.

- Vol. 65 (1926), No. 3. The Prehistoric Peruvians. Charles W. Mead.
 The Peopling of the Earth. Ales Hrdlicka.
 The People of the Main American Cultures. Ales Hrdlicka.
 Universal Atomic Volcanism and the Millikan Cosmic Rays. Monroe B. Snyder.
 Universal Atomic Volcanism and the Ultimate Atom. Monroe B. Snyder.
 Further Studies on the Allotropy of Germanic Oxide. John H. Muller.
 The Metabolism of Uric Acid. Withrow Morse.
 The Newer Knowledge of the Physiological Action of Ultra-Violet Rays. Alfred F. Hess.
 Discussion of the Kinetic Theory of Gravitation, III. Charles F. Brush.
 The Present Status of the Hittite Problem. George A. Barton.
- Vol. 65 (1926), No. 4. The Aztecs and Their Predecessors in the Valley of Mexico. Zelia Nuttall.
 On the Occurrence of *Palaeaspis* and on the Occurrence in the United States of Fossil Fishes Belonging to the Family Pteraspidae. William L. Bryant.
 Culture Problems in Northeastern North America. Frank G. Speck.
 Progress in the Study of Race Mixtures with Special Reference to Work Carried on at Harvard University. Earnest A. Hooten.
 Equiangular Spiral Polygons as Presenting Themselves in Electrical Engineering. A. E. Kennelly.
 The History of *Oenothera biennis* Linnaeus, *Oenothera grandiflora* Solander, and *Oenothera Lamarckiana* of de Vries in England. Bradley M. Davis.
 Prediction of the Spectrum of the Cosmic Rays. Monroe B. Snyder.
- Vol. 65 (1926), No. 5. Table of Contents, Minutes of Meetings, Index.
- Vol. 65 (1926), No. 5. Supplement. The Health Work of the League of Nations. Victor G. Heisler.
 Behavior of Organic Bases Towards Soluble Tungstates. Edgar F. Smith.
 An Interesting Behavior of Soluble Metatungstates. Edgar F. Smith.
Martinichtys—a New Genus of Cretaceous Fish from Kansas, with Descriptions of Six New Species. C. E. McClung.
 The Flora of the Serra da Bocaina. Bertha Lutz.
 The Fluogermanates of the Univalent Metals. John H. Müller.
 An Ecological-Anatomical Study of Beach Vegetation in the Philippines. Raymond Kienholz.
- Vol. 66 (1927). Bicentenary Celebration. The Origin and Activities of the American Philosophical Society and an Address on the Dynamic Factor in Evolution. Francis X. Dercum.
 The Endocrine Organs as a Foundation for Scientific Medicine. Charles E. de M. Sajous.
 The Development of Biological Research in America. C. E. McClung.
 Roger Bacon. R. B. Burke.
 The Acoustic Impedance of Straight Cylindrical Air Columns in Brass Tubes. A. E. Kennelly and R. P. Siskind.
 Problems in the Colonization and Settlement of Tropical South America. Adolpho Lutz.
 Platonism and the History of Science. Paul Shorey.
 Cosmopolitanism in German Romantic Thought. Kuno Francke.
 The Idiom of Jutland. John D. Prince.
 Recent Developments in Spectroscopy. R. A. Milligan.
 Accomplishments of Modern Astronomy. C. G. Abbot.
 Persistent Generation of Heat in Some Rocks and Minerals, and Its Probable Significance. Charles F. Brush.
 The Widmanstätten Structure of Iron Alloys. Albert Sauveur.
 Recent Light on Classic Problems in the Theory of Numbers. L. E. Dickson.

- Valence. William Albert Noyes.
Development of Botany in the United States. John M. Coulter.
Lamarck's Evening Primrose (*Oenothera Lamarckiana* Springe) was a Form of *Oenothera grandiflora* Solander. Bradley M. Davis.
The Organic Content of the Water of Small Lakes. Edward A. Birge and Chancy Juday.
Recent Discoveries Relating to the Origin and Antiquity of Man. Henry Fairfield Osborn.
The Skull of *Eusmilus*. William J. Sinclair and G. L. Jepson.
Development of American Palaeontology. William B. Scott.
Age Changes in Anthropological Characters in Childhood and Adult Life. Clark Wissler.
The Origin of Man from the Anthropoid Stem—When and Where? William K. Gregory.
Sea-level Surfaces and the Problem of Coastal Subsidence. Douglass Johnson and Elizabeth Winter.
Metabolic Changes in the Body of Female Pigeons at Ovulation. Oscar Riddle.
The Gaseous Metabolism of Large Wild Birds under Aviary Life. Francis G. Benedict and Edward L. Fox.
The Genesis of Alkaline Rocks. C. H. Smyth, Jr.
How History Can Be Made a Science. Edward P. Cheyney.
The Growth of Anglo-American Law Since the Days of the Junto. Hampton L. Carson.
Geography Among the Earth Sciences. Albrecht Penck.
University Education in the United States. James R. Angell.
Democracy and the Control of Foreign Affairs. William E. Lingelbach.
Other matter relating to the Centenary Celebration.
- Vol. 67 (1928), No. 1. Some Neglected Botanical Results of the Lewis and Clark Expedition. Rodney H. True.
Fossil and Recent Corals and Coral Reefs of Western Mexico. Three New Species. R. H. Palmer.
Substances Regulating the Passage of Material into and out of Plant Cells: the Lipoids. D. T. MacDougal.
Trianaopiper, a New Genus of Piperaceae. William Trelease.
Omarhamphus, a New Flightless Bird from the Lower Eocene of Wyoming. William J. Sinclair.
A Proposed Guide-Book to the World's Weather and Climates. Robert DeC. Ward.
Can Business Be Made a Science? Emory R. Johnson.
- Vol. 67 (1928), No. 2. Discussion of the Kinetic Theory of Gravitation IV: Correlation of Continual Generation of Heat in Some Substances, and Impairment of their Gravitational Acceleration. Charles F. Brush.
Reports of the Princeton University Expeditions to Patagonia, 1896-1899. William Berryman Scott.
A Method for Determining the Constants of an Electromagnetic Oscillograph. A. E. Kennelly.
Were the Ancestors of Man Primitive Brachiators? William K. Gregory.
Present Status of the Problem of Human Ancestry. Henry Fairfield Osborn.
Racial Characters in Human Dentition. Milo Hellman.
The Present Status of Research in Education. Frank P. Graves.
Textual Criticism of the Greek Old Testament. Max S. Margolis.
- Vol. 67 (1928), No. 3. Some Economic Implications of America's Changing World Status. Ernest Minor Patterson.
An Enactment of Fundamental Constitutional Law in Old South Arabia. James A. Montgomery.
Tundra Vegetation of Central Alaska Directly under the Arctic Circle. John W. Harshberger.

- The Atom. W. F. G. Swann.
The Distances of the Stars. S. A. Mitchell.
Meteorology for Aviation. William R. Blair.
The Development of the Heavier-Than-Air Machine. C. H. Biddlecombe.
Tissue Respiration as the Function of the Internal Secretions Which Science Has Sanctioned. Charles E. de M. Sajous.
- Vol. 67 (1928), No. 4. Lighter-Than-Air Machines. C. E. Rosendahl.
Two Additional Species of Trianaopiper. William Trelease.
The Upright Posture of Man: a Review of Its Origin and Evolution. William K. Gregory.
- Vol. 68 (1929), No. 1. Man's Future in the Light of His Past and Present. Ales Hrdlicka.
The Vegetation of the Screens, or Talus Slopes of Western North America. John W. Harshberger.
Some Observations on Comparative Constitution in Man and the Lower Mammals. Herbert Fox.
Lindenopiper, a Generic Segregate from Piper. William Trelease.
Gravitation. Charles F. Brush.
- Vol. 68 (1929), No. 2. An Experimental Investigation of the Physical Nature of Death. George W. Crile, Maria Telkes and Amy F. Rowland.
The Vegetation of Campos de Jordão, Brazil. John W. Harshberger.
Mean Sea-level Studies in New York Waters. Douglas Johnson.
Old-World Prehistory in Retrospect and Prospect. George Grant MacCurdy.
The Special Contribution of Developmental Mechanics to the Thought and Purpose of the Man of Tomorrow. Oscar Riddle.
Some Problems of Railroad Consolidation. Emory R. Johnson.
The Nutritional Properties of Malignant Cells. Alexis Carrel.
A Sketch of the Life of John Bradbury, Including His Unpublished Correspondence with Thomas Jefferson. Rodney H. True.
The Chemical Stimulus Essential of Growth by Increase in Cell Number. Frederick S. Hammett.
- Vol. 68 (1929), No. 3. A Mounted Skeleton of Palaeonictis. William J. Sinclair and Glenn L. Jepsen.
Gudermannians and Lambertians with Their Respective Addition Theorems. Arthur E. Kennelly.
Some Educational Values of the American Revolution. Evarts B. Greene.
The Tomb of the Moghul Emperor Babur in Afghanistan. A. V. Williams-Jackson.
The Concept of Nature in Philosophy and Literature; a Consideration of Recent Discussions. Albert Schinz.
Different Rates of Growth among Animals with Special Reference to the Odonata. Philip P. Calvert.
- Vol. 68 (1929), No. 4. On the Nature of Thought and Its Limitations. Francis X. Dercum.
The Origins of Civilization in Africa and Mesopotamia. Their Relative Antiquity and Interplay. George A. Barton.
A Comparison of Egyptian and Babylonian Civilizations and Their Influence on Palestine. Alan Rowe.
- Vol. 69 (1930), No. 1. Why the 200-inch Telescope. Elihu Thomson.
Ten Unsolved Mysteries of the Stellar Universe. Harlow Shapley.
- Vol. 69 (1930), No. 2. Anarctica. Isaiah Bowman.
Studies on Weathering and Soil Formation in Tropical High Altitudes. M. W. Senstius.
- Vol. 69 (1930), No. 3. The Changed Conception of the Constitution. James M. Beck.

- Vol. 69 (1930), No. 4. New Vertebrate Fossils from the Lower Eocene of the Bighorn Basin, Wyoming. Glenn L. Jepsen.
Upper Cretaceous Dinosaur Faunas of North America. Loris S. Russell.
Parallel Connections of Identical Nets. A. E. Kennelly.
Recent Progress in the Field of Old World Prehistory. George Grant MacCurdy.
Glozel: A Mystery. David Riesman.
The Current Status of International Law. Clyde Eagleton.
The Natural Chemical Regulation of Growth by Increase in Cell Number. Frederick S. Hammett.
Recent Archaeological Discoveries in the Philippines and Their Bearing on the Prehistory of Eastern Asia. R. B. Dixon.
The Toxicity of Molecules and Ions. Rodney H. True.
The Wave Properties of Electrons. C. J. Davisson.
- Vol. 69 (1930), No. 5. Address. Abraham Flexner.
The Outlook for Higher Education. Frank Aydelotte.
A Comment on College Administration. F. J. E. Woodbridge.
- Vol. 69 (1930), No. 6. The Surface Precipitation Reaction of Living Cells. L. V. Heilbrunn.
The Kinetics of Bioluminescent Reactions of Short Duration. E. Newton Harvey and Peter A. Snell.
The Geography of American Peppers. William Trelease.
Lengthened Growth Periods and Continuous Growth. Daniel T. MacDougal.
Vergil After Two Thousand Years. John C. Rolfe.
An Electro-Chemical Interpretation of Memory. George W. Crile.
Some Phases of Railroad Consolidation. Emory R. Johnson.
Identical Twins as Biological Controls in Educational and Other Human Problems. Albert F. Blakeslee and Howard J. Banker.
Recent Trends in Anthropology. Fay-Cooper Cole.
On Certain Fish-Like Forms from Norway. William Berryman Scott.
- Vol. 69 (1930), No. 7. An Introductory Statement to the Symposium. John A. Miller.
The Structure and Rotation of the Galaxy. J. S. Plaskett.
The Physics of a Star. John Q. Stewart.
Heights in the Chromosphere from Eclipse Spectra. S. A. Mitchell.
A Millennium of Biblical History in the Light of Recent Excavations. William F. Albright.
Statigraphy and Paleontology of the Paleocene of Northeastern Park County, Wyoming. G. L. Jepsen.
- Vol. 69 (1930), No. 8. A number given up to miscellaneous matter including the dinner addresses of April 2, 1930, at New York City, and the dinner of April 26, 1930, at Philadelphia.
- Vol. 70 (1931), No. 1. Non-Living and Living Matter. Francis X. Dercum.
Jurassic History of North America: Its Bearing on the Development of Continental Structure. C. H. Crickmay.
- Vol. 70 (1931), No. 2. Rationalized Versus Unrationalized Practical Electromagnetic Units. Arthur E. Kennelly.
The Changes Which Gaseous Ions Undergo with Time. John Zeleny.
The Railroads Versus the Weather. Robert DeC. Ward.
Diffusion Processes in Non-Living and Living Systems. M. H. Jacobs.
The Elephant Enamel Method of Measuring Pleistocene Time. Also Stages in the Succession of Fossil Man and Stone Age Industries. Henry Fairfield Osborn and Edwin H. Colbert.
Some Economic Aspects of Rome's Early Law. Tenney Frank.
Untangling One of Nature's Puzzles. B. Smith Hopkins.

- Vol. 70 (1931), No. 3. "Assault on Atoms." Arthur H. Compton.
Hopes in the Biological Sciences. William Morton Wheeler.
Lengthening the Span of Life. Lee K. Frankel.
Technology and Material Progress. Willis R. Whitney.
Economic Adjustment in a Machine Age. Ernest Minor Patterson.
Communication and World Peace. Waldemar Kaempffert.
Unemployment and Its Social Significance. Arthur Woods.
Thou Shalt Not. James M. Beck.
- Vol. 70 (1931), No. 4. India's Will to Be a Nation. W. Norman Brown.
The Advantages of Lessening Radiation in the Cylinders of Internal Combustion Engines. Frances I. du Pont.
The Return to Shakespearean Orthodoxy. Felix E. Schelling.
Osmotic Hemolysis and Zoological Classification. M. H. Jacobs.
Preliminary Results in the Application of the Motion Picture Camera to Celestial Photography. Frances C. McMath, Henry S. Hulbert, Robert R. McMath.
Individual vs. Mass Studies in Child Growth. C. B. Davenport.
The Gottschee Germans of Slovenia. John Dyneley Prince.
- Vol. 70 (1931), No. 5. Much miscellaneous matter.
Leslie William Miller. Arthur W. Goodspeed.
- Vol. 71 (1932), No. 1. The Railroad Situation: Some Suggestions as to the Way Out. Emory R. Johnson.
A Way for the Railways to Keep out after They Are out. Alba B. Johnson.
Co-ordination as a "Way out" of the Transportation Crisis. G. Lloyd Wilson.
- Vol. 71 (1932), No. 2. Francis X. Dercum. Albert P. Brubaker.
Unemployment Insurance. S. S. Huebner.
- The Wilson Bulletin. Official Organ of the Wilson Ornithological Club:**
Vol. 37 (1925), No. 1. Down with the House Wren Boxes. Althea R. Sherman.
Owl Notes from Ohio. Charles R. Wallace.
Bird Banding at the Iowa Lakeside Laboratory. Dayton Stoner.
Birds of the Sioux Falls Region. Adrian Larson.
Many general notes, miscellaneous.
- Vol. 37 (1925), No. 2. Martins and Martin Houses. T. H. Whitney.
Birds of Sioux Falls and Vicinity. Adrian Larson.
Birds Seen between Porto Rico and New York. Stuart T. Danforth.
Birds of Fulton County, Kentucky. L. Otley Pindar.
Many general notes, miscellaneous.
- Vol. 37 (1925), No. 3. Additional Evidence Against the House Wren. Althea R. Sherman.
Field Studies of the Diurnal Raptores of Eastern and Central Kansas. Howard Kay Gloyd.
Ten All-Day Bird Censuses from Dutchess County, N. Y. Maunsell S. Crosby.
Statistics on the House Wren. O. M. Byrens.
Bad Habits of the House Wren. Mrs. Charles F. Weigle.
Birds of Fulton County, Kentucky. L. Otley Pindar.
Many general notes, miscellaneous.
- Vol. 37 (1925), No. 4. Notes on the Nesting of the Goshawk in Potter County, Pennsylvania. George Miksch Sutton.
Observations on Shore Birds in Central Oklahoma in 1924. Margaret Morse Nice.
The Whip-poor-will: Its Prospects of Survival in Southern Iowa. E. D. Nau-man.

- Notes on the Shore Birds of Central Iowa. W. M. Rosen.
 Summer Birds at Huron Mountain, Michigan. Bayard H. Christy.
 Many notes, miscellaneous.
- Vol. 38 (1926), No. 1. The Barred Owl (*Strix varia varia*). Edward von S. Dingle.
 Kansas City as a Center of Early Ornithological Work in the West. Myron H. Swenk.
 In Search of New Colonies of Kirtland Warblers. Norman A. Wood.
 A House Wren Study. Mrs. Marie Dales.
 Birds of the Red River Valley of Northeastern North Dakota. H. V. Williams.
 Many notes, miscellaneous.
- Vol. 38 (1926), No. 2. White Pelicans and Other Birds of Chase Lake, North Dakota. Walter W. Bennett.
 Color Reproduction of Bird Illustrations. Harry G. Lotz.
 Behavior of Blackburnian, Myrtle, and Black-throated Blue Warblers, with Young. Margaret M. Nice.
 An Iowa Bird Census. E. D. Nauman.
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- Vol. 38 (1926), No. 3. A Bird Sanctuary on Reclaimed Land. Frank M. Woodruff.
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 Notes on the Birds of Pinellas and Pasco Counties, Florida. William G. Fargo.
 Many notes, miscellaneous.
- Vol. 38 (1926), No. 4. A Study of a Nesting of Magnolia Warblers (*Dendroica magnolia*). Margaret Morse Nice.
 Nesting of the Common Tern at Thousands, Jefferson County, New York. Clarence Bretsch.
 A Field Trip in the Sierra. Mrs. H. J. Taylor.
 The Birds of the Choctawhatchee Bay Region of Florida. W. W. Worthington and W. E. Clyde Todd.
 Many notes, miscellaneous.
- Vol. 39 (1927), No. 1. The Mentality of the Crow. William Brewster Taber, Jr.
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 Feathered Victims of the Automobiles. Charles J. Spiker.
 Tabulating the Feeding of Nestlings. A. E. Shirling.
 Three Interesting Breeding Records for 1925 from the Piedmont Region of Northeastern Georgia. Thomas D. Burleigh.
 On the Alder Flycatcher (*Empidonax traillii alnorum*). P. B. Peabody.
 Summer Birds in the Vicinity of Plum Lake, Vilas County, Wisconsin. Alvin R. Cahn.
 Many notes, miscellaneous.
- Vol. 39 (1927), No. 2. The Military Use of the Homing Pigeon. Frederick C. Lincoln.
 Notes on the Wintering Habits of the White-throated Sparrow. H. G. Good and T. R. Adkins.
 Home Life of the Black Tern in Wisconsin. Paul W. Hoffman.
 Some Observations in a Green Heron Colony. Bessie Price Reed.
 Autobiography of Leroy Titus Weeks.
 Notes on the Birds of Douglas County, Kansas. Jean Linsdale and E. Raymond Hall.
 Many notes, miscellaneous.
- Vol. 39 (1927), No. 3. Flocking, Mating, and Nest-Building Habits of the Prairie Horned Lark. George Miksch Sutton.

- Notes on the Home Life of the Turkey Vulture. Russell Marshall Kempton.
 The Autobiography of Otto Widmann.
 Notes on Some Less Common Birds of Douglass County, Kansas. Charles Eugene Johnson.
 Notes from La Anna, Pike County, Pennsylvania. Thomas D. Burleigh.
 Many notes, miscellaneous.
- Vol. 39 (1927), No. 4. Down Bird Island Way. J. J. Carroll.
 Richardson's Grouse in Yellowstone Park. M. P. Skinner.
 Where Do Birds Spend the Night? Laurence M. Huey.
 Notes on the Rail. E. D. Nauman.
 Auxiliary Gun Barrels for Collecting Bird Specimens. W. G. F.
 Notes on the Occurrence of Shore Birds and Water Fowl on a New Artificial Lake. Samuel Eddy.
 A Brief Study of Canadian Zone Birds in Highland County, Virginia. John B. Lewis.
 Many notes, miscellaneous.
- Vol. 40 (1928), No. 1. The Courtship Behavior of Barrow's Golden-Eye. Edmund Joseph Sawyer.
 Some Impressions of the Commoner Winter Birds of Southern Arizona. Myron H. and Jane Bishop Swenk.
 Are Birds Decreasing in Numbers? Althea R. Sherman.
 Birds of Eastern McKenzie County, North Dakota. Adrian Larson.
 Many notes, miscellaneous.
- Vol. 40 (1928), No. 2. Alexander Wilson: A Sketch. Mrs. H. J. Taylor.
 Notes on a Collection of Hawks from Schuylkill County, Pennsylvania. George Miksch Sutton.
 Individuality in Bird Song. Lucy Baxter Coffin.
 Birds of Eastern McKenzie County, North Dakota. Adrian Larson.
 Many notes, miscellaneous.
- Vol. 40 (1928), No. 3. The Canada Goose in Yellowstone Park. M. P. Skinner.
 Bob-white and Scarcity of Potato Beetles. E. L. Moseley.
 Chimney Swifts in November, 1925. Otto Widmann.
 How Does the Turkey Vulture Find Its Food? John B. Lewis.
 Some Environmental Relations of the Birds of the Mississippi Region. Jean M. Linsdale.
 Birds Observed in the Vicinity of Santiago De Cuba. Stuart T. Danforth.
 Birds of Upper South Carolina: A Study in Geographic Distribution. A. L. Pickens.
 Many notes, miscellaneous.
- Vol. 40 (1928), No. 4. Notes on the Social Habits and Songs of the Mockingbird. J. Paul Visscher.
 On the Status of Harlan's Hawk. G. Eifrig.
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 A Theory of How the Turkey Vulture Finds Its Food. William Brewster Taber, Jr.
 A Southward Movement of Breeding Savannah Sparrows in Ohio. Louis W. Campbell.
 Nesting Habits of the Seaside Sparrows in Florida. Donald J. Nicholson.
 Birds of Upper South Carolina: A Study in Geographical Distribution. A. L. Pickens.
 Many notes, miscellaneous.
- Vol. 41 (1929), No. 1. In the Haunts of the Wood Ibis. Ernest G. Holt.
 The Mechanical Execution of Wilson's "American Ornithology." Frank L. Burns.

- The Hungarian Partridge in Northwest Iowa. Charles J. Spiker.
Some Shorebird Records for the Miami Valley, Ohio. Ben J. Blincoe.
Easter Birds of Little Egypt. Alvin R. Cahn and A. Sidney Hyde.
Many notes, miscellaneous.
- Vol. 41 (1929), No. 2. The Heath Hen Census for 1929. Alfred O. Gross.
Nesting of the Pine Siskin in North Dakota. Russel Reid.
Nesting of the Pine Siskin in Iowa with Remarks on Regurgitative Feeding.
Marie Dales and Walter W. Bennett.
The Pine Siskin in Nebraska: Its Seasonal Abundance and Nesting. Myron
H. Swenk.
Notes on Bird Mimicry with Special Reference to the Mockingbird (*Mimus
polyglottus*). Frank F. Gander.
Some Unusual Water Bird Visitors to Tennessee. Albert F. Ganier.
Many notes, miscellaneous.
- Vol. 41 (1929), No. 3. Harris' Sparrow and the Study of It by Trapping.
Myron H. Swenk and O. A. Stevens.
Bird Life of a Transient Lake in Kentucky. Gordon Wilson.
Many notes, miscellaneous.
- Vol. 41 (1929), No. 4. In Search of the Loon (*Gavia immer*) with Movie
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On a Collection of Gyrfalcons from Greenland. Walter Koelz.
Dr. Elliot Coues: A Sketch. Mrs. H. J. Taylor.
The Florida Cormorant as Observed in Pinellas County, Florida. William G.
Fargo.
Spring Bird Notes from Randolph County, Georgia. Francis Harper.
Many notes, miscellaneous.
- Vol. 42 (1930), No. 1. The Old Ornithology and the New. Althea R. Sher-
man.
The Nesting Wrens of Brooke County, West Virginia. George Miksch Sutton.
The Fall Migration of Mourning Doves. William Brewster Taber, Jr.
Nesting of the White-winged Junco in the Black Hills of South Dakota. W.
H. Over and G. M. Clement.
Habits of the Florida Red-Shouldered Hawk. Donald J. Nicholson.
Water Birds in a Dry Land. Walter E. Lewis.
Bird Migration Records in Northwest Arkansas. W. J. Baerg.
Many notes, miscellaneous.
- Vol. 42 (1930), No. 2. The Crown Sparrows (*Zonotrichia*) of the Middle
West. Myron H. Swenk.
Status of Gambel's Sparrow in Michigan. Josselyn Van Tyne.
The Sequence of the Molt. Lynds Jones.
Breeding of the Least Tern in Iowa. William Youngworth.
Breeding of the Least Tern on the Mississippi River. Albert F. Ganier.
Common Terns Nesting Near Toledo, Ohio. Louis W. Campbell.
A Letter from Robert Ridgway. Frank L. Burns.
Chimney Swift Banding Operations at Chattanooga. Wyman R. Green.
Some New Birds for Oklahoma from Okmulgee and Tulsa Counties. Edith R.
Force and W. H. Koons.
Recent Bird Records from Northeastern Colorado and Their Significance in
Connection with Geographic Distribution. F. L. Fitzpatrick.
Many notes, miscellaneous.
- Vol. 42 (1930), No. 3. Nesting of the Sandhill Crane in Florida. Ernest G.
Holt.
The Decline of the Jacksnipe in Wisconsin. Aldo Leopold.
Fluctuation of Bird Life with Change in Water Level. E. L. Moseley.
The Economic Importance of Birds as Insect Predators. C. N. Ainslie.

- Birds of the Yellowstone National Park with Some Recent Additions. Emer-
son Kemsies.
Many notes, miscellaneous.
- Vol. 42 (1930), No. 4. The Barro Colorado Laboratory as a Station for Orni-
thological Research. Josselyn Van Tyne.
Notes on the Wild Turkey in Indiana. S. E. Perkins, III.
Larine Succession on Lone Tree Island. C. G. Manuel.
Territorial Disputes of Three Pairs of Nesting Marsh Hawks. Paul L. Er-
rington.
Seasonal Change in a Bird Habitat in Texas. G. Eifrig.
Notes on the Birds of South Central Kansas. F. M. Alexander.
Notes on the Birds of Cranberry Glades, Pocahontas County, West Virginia.
Maurice G. Brooks.
Birds of Buchanan County, Iowa. Fred J. Pierce.
Many notes, miscellaneous.
- Vol. 43 (1931), No. 1. Nesting of the Duck Hawk in Tennessee. Albert F.
Ganier.
A Preliminary Report on the Influence of Light Intensity upon the Time of
Ending of the Evening Song of the Robin and Mockingbird. Jesse M.
Shaver and Ruby Walker.
The Soaring of Raptorial Birds. R. H. Palmer.
Quartering Flight in Migration. E. C. Hoffman.
Control of Insects by Birds. W. L. McAttee.
Migration of Canada Geese from the Jack Miner Sanctuary and Banding Op-
erations. Manly F. Miner.
The Ridgway Memorial Completed. Harry C. Oberholser.
Notes on the Breeding Birds of State College, Center County, Pennsylvania.
Thomas D. Burleigh.
Many notes, miscellaneous.
- Vol. 43 (1931), No. 2. Survival and Reproduction in a Song Sparrow Popula-
tion. Margaret Morse Nice.
Notes on the Song and Territorial Habits of Bullock's Oriole. Alden H.
Miller.
The Status of the Goshawk in Pennsylvania. George Miksch Sutton.
Birds of Southern Louisiana. Alfred M. Bailey and Earl G. Wright.
Many notes, miscellaneous.
- Vol. 43 (1931), No. 3. An Analysis of a Series of Photographs of the Common
Tern. Olin S. Pettingill, Jr.
Ecological Factors in Migration. Ruskin S. Freer.
Pioneers in Economic Ornithology. Mrs. H. J. Taylor.
Birds of Southern Louisiana. Alfred M. Bailey and Earl G. Wright.
Many notes, miscellaneous.
- Vol. 43 (1931), No. 4. The Status, Breeding Range, and Habits of Marian's
Marsh Wren. H. E. Wheeler.
The American Egret and the Little Blue Heron in Ohio during the Summer of
1930. Lawrence E. Hicks.
The Effect of Pole Traps on Harmless and Beneficial Species. H. M. Wight.
Winter Food of Oklahoma Quail. Lois Gould Bird and R. D. Bird.
Many notes, miscellaneous.
- Vol. 44 (1932), No. 1. Nesting of the Bald Eagle. A. F. Ganier.
The Influence of Temperature on Migration. John S. Main.
A Winter Robin Roost in Arkansas. J. D. Black.
Curvature of Wing and Soaring Flight. William Brewster Taber, Jr.
George W. and Titian R. Peale and the Ornithological Section of the Old Phil-
adelphia Museum. Frank L. Burns.
Many notes, miscellaneous.

The Condor. A Magazine of Western Ornithology. Official Organ of the Cooper Ornithological Club:

Vol. 34 (1932), No. 1. A Quest for a Condor. Bayard H. Christy.
David Starr Jordan and His Interest in Birds. Barton Warren Evermann.
Observations on Some Breeding Birds of El Salvador, Central America. Alden H. Miller.
Observations on the Nesting of the Blue-gray Gnatcatcher. Margaret Morse Nice.
Notes on the Occurrence of Water and Shore Birds in the Lochsa Region of Idaho. R. L. Hann.
Preliminary Studies of Western Hermit Thrushes. Thomas T. McCabe and Blinor B. McCabe.
Notes on a Collection of Birds from Mansel Island, Hudson Bay. George Miksch Sutton.
Many notes, miscellaneous.

Vol. 34 (1932), No. 2. Are Rings of Holes in Tree Bark Made by Downy Woodpeckers? Charles W. Townsend.
Observations on the Head Markings of the Golden-crowned Sparrow. Joseph Mailliard.
Nesting of the Hammond Flycatcher in Eldorado County, California. Rose Carolyn Ray.
Technique of Raptor Food Habits Study. Paul L. Errington.
The New Check-lists of 1931—a Critical Commentary. Joseph Grinnell.
The Summer Distribution of Certain Birds in Central and Northern Arizona. Alden H. Miller.
Many notes, miscellaneous.

Bird Banding. A Journal of Ornithological Investigation:

Vol. 2 (1931), No. 4. Some Details of the Migration Habits of White-throated Sparrows. Mabel Gillespie.
Avian Mortality. Oliver L. Austin.
On the Status of Juncoes in the East Having White Wing-bars. Lewis O. Shelley.
Recoveries of Purple Crackles Banded at Paoli, Pennsylvania. Horace D. McCann.
Some Notes on the Breeding of the Vesper Sparrow. Lincoln Bryant, Jr.
Many notes, miscellaneous.

Vol. 3 (1932), No. 2. Notes on the Breeding of the Tree Swallow. O. L. Austin, Jr., and S. H. Low.
The Song Sparrow Breeding Season of 1931. Margaret Morse Nice.
The Austin Ornithological Research Station. Oliver L. Austin.
Report of Tern Banded on Cape Cod During 1931. Charles B. Floyd.
Many notes, miscellaneous.

The Oologist, Birds, Nests, Eggs, Taxidermy:

Vol. 49 (1932), Nos. 1, and No. 2. These two numbers of this interesting monthly Journal contain much interesting information for the bird lovers among our membership.

Aviculture. A Journal Devoted to Lovers and Keepers of Birds in Parks, Gardens, Avaries and Cages. Organ of the Avicultural Society of America (Series II):

Vol. 3 (1931), Nos. 1-12. This journal contains a great deal of very interesting material about birds, especially about the birds kept in avaries. Each number contains a colored bird picture. In these numbers, the colored pictures are of: Plumed Jay, Blue variety of the Alexandrine Parrakeet, Common Green Pigeon, Blue Rock Pigeon, Red-Wattled Lapwing, Spix Macaw, Blue-breasted Roller, Crimson-breasted Conure, Mexican Black-headed Oriole,

Black-headed Partridge, Golden-fronted Green Bulbul, Tabuan Parrakeet, Some African Waxbills (a group of eight Finches), Yellow-breasted Cissa.

Vol. 4 (1932), Nos. 1-3. Number 1 has a very interesting list of wild birds bred in captivity in U. S. A. The colored pictures in this series of interesting numbers are: Elliott's Pitta, Siamese Fire-Back Pheasant, Red-Crowned Wart Pigeon.

Vol. 4 (1932), No. 4. (The contents of this number are given more in detail than those above in order to give our members a better idea of this interesting journal.) Colored picture: Parrotlets or Blue-Winged Lovebirds.
Australian Birds Seldom Seen in Private Collections. H. Hodgkins.
The Bittern in Captivity. A. F. Moody.
Hybrids. Mr. and Mrs. A. R. Hood.
Breeding the Rosette Cockatoo. William H. Browning.
Notes on Doves as Foster Parents. Paul D. Barnes.
Some Notes from Germany. Fritz Polz.
The Trained Piping Bullfinch. F. E. Wilkinson.
Celestial Parrotlets. Mr. and Mrs. A. R. Hood.
Not the Celestial Parrotlet. Mrs. Susie Tomlinson.
Feathered Families on Wintergreen. Clare Runchey Corsan.
Trumpeter Swans. G. H. Corsan.
Zebra Society Finch Hybrid. Mrs. A. R. Hood.
Notes from the El Pajaro Avaries. A. F. Tomlinson.
In England Now. Harold T. King.
Miscellaneous information.

Bird Notes and News. The Journal of the Royal Society for the Protection of Birds (London):

Vol. 14 (1930), No. 1. An Appeal for Birds of Prey. Major Antony Buxton.
Buzzards in Devonshire.
The Oil Menace.
The Great Spotted Woodpecker.
Economic Ornithology.
Romney Marsh Bird Sanctuary.
Many notes, miscellaneous.

Vol. 14 (1930), No. 2. The Pole Trap.
International Zoological Congress.
Wild Life in New Zealand.
Birds in Our Sydney Gardens.
Economic Ornithology.
Bird Island on Fire.
Bird Sanctuaries.
Roosting Places.
Some Odd Nests in 1930.
The Oil Menace.
Many notes, miscellaneous.

Vol. 14 (1930), No. 3. Diana and Minerva. Harriers.
Birds in an East Riding Parish. T. Hyde Parker.
The Oil Menace.
Economic Ornithology.
Many notes, miscellaneous.

Vol. 14 (1930), No. 4. Bird Life on Vancouver Island. Charles E. Alford.
The Oil Menace.
Public School Essay Composition.
The Plumage Trade.
Moorhens in an Essex Garden. Evelyn M. Weston.
Many notes, miscellaneous.

- Vol. 21 (1931), No. 2. Faune de Belgique. Observations ornithologiques faites en Belgique de Mai 1930 a Mai 1931. (Ornithological observations made in Belgium from May, 1930, to May, 1931.) G. van Havre. Oeuvre du Bagueage des Oiseaux en Belgique. (The work of ringing Belgian birds.) Miscellaneous.
- Vol. 21 (1931), No. 3. Faune de Belgique. Observations ornithologiques faites en Belgique de Mai 1930 a Mai 1931. (Ornithological observations made in Belgium from May, 1930, to May, 1931.) G. van Havre. Exploration ornithologique de la Belgique. Les Colonies de Cormorans. (The colonies of cormorants.) C. Dupond. Ringed birds, miscellaneous.
- Vol. 21 (1931); No. 4. Faune de Belgique. Description d'un Plongeon presume hybride. (Description of a presumably hybrid loon.) G. van Havre. Observations sur les Oiseaux de proie. (Observations on birds of prey.) J. De Blicck.
- Exploration ornithologique de la Belgique. Les Colonies de Cormorans. (The colonies of cormorants.) C. Dupond. Ringed birds, miscellaneous.

WHAT THE TENNESSEE ACADEMY OF SCIENCE IS DOING FOR BIRD STUDENTS

JESSE M. SHAVER, EDITOR

The Tennessee Academy of Science is much interested in the work and welfare of the Ornithologists of Tennessee. It hopes through the *Journal* and the library, which it is engaged in building, to stimulate interest in the study of Tennessee birds and to encourage the worthwhile work of the amateur student. To this end it proposes to publish a well-illustrated article about birds in each number of the *Journal*. It is hoped to have each article about ten pages in length. To make this phase of the *Journal* as significant and worth-while as possible, Mr. Harry Monk, a very thorough bird student of Nashville has been added to the editorial staff. He will attempt to see that each number of the *Journal* has a significant article on birds; he will also try to tie all the existing bird organizations in the state closer to the Academy. While the Tennessee Ornithological Society has been closely affiliated with the Tennessee Academy of Science, it is our hope to have all bird students in the state belong to the Academy and attend its meetings.

The Editor is also working on a plan to publish a colored plate of some bird in each issue of the *Journal*. This anticipation may not be realized. However, it is good to have as a goal.

Some thought has also been given to book reviews—in this case, of outstanding books on ornithology. Each review would be limited to a page in the *Journal*. The book thus reviewed would be placed in the Academy's library at Vanderbilt University and would be available there to all members. In addition, under proper restrictions, it might be borrowed by a member living outside of Nashville.

The plan is for our library to grow so that it will contain all of the important current periodicals on ornithology from the United States

and the rest of the world. A small beginning has been made along this line. Already thirteen ornithological journals are being received regularly and are available to our members in our library in the main library of Vanderbilt University. A complete list of these journals follows:

1. *The Wilson Bulletin*. Official Organ of the Wilson Ornithological Club.
2. *The Condor*. The Cooper Ornithological Club.
3. *The Oologist*. Illinois.
4. *Bird Banding*. Published for the three major bird banding organizations in the United States.
5. *Aviculture*. The Avicultural Society of America.
6. *Roosevelt Wild Life Station Annuals and Bulletins*.
7. *Bird Notes and News*. The Royal Society for the Protection of Birds (England).
8. *The South Australian Ornithologist*. (Australia).
9. *le Gerfaut*. Revue belge d'Ornithologie. (Belgium, Published in French).
10. *Alauda* (French).
11. *Der Vogelzug* (German).
12. *El Honero*. Revista de la Sociedad Ornithologica del Plata. (Argentina. Published in Spanish).
13. *Organ der Club van Nederlandsche Vogelkundigen*. (Published in Dutch.)

The Editor would be pleased to receive comments from the members both commendatory and condemnatory respecting the above policy of the *Journal*. Suggestions for the betterment of the *Journal* will be most welcome.

(NOTE: *The above is the first of a series of articles dealing with plans for making the Journal more valuable to its members. Geology, Medicine, Physics, Chemistry, etc., will be treated in a similar way in forth-coming numbers.*)