



# Griffin (Donald R.) papers

---

This finding aid was produced using ArchivesSpace on March 07, 2020.  
Describing Archives: A Content Standard

Rockefeller Archive Center

15 Dayton Avenue  
Sleepy Hollow 10591

[archive@rockarch.org](mailto:archive@rockarch.org)

URL: <http://www.rockarch.org>

---

## Table of Contents

---

|                                  |    |
|----------------------------------|----|
| Summary Information .....        | 3  |
| Biographical / Historical .....  | 3  |
| Scope and Contents .....         | 6  |
| Arrangement .....                | 6  |
| File Plan .....                  | 6  |
| Administrative Information ..... | 7  |
| Controlled Access Headings ..... | 8  |
| Collection Inventory .....       | 8  |
| Correspondence .....             | 8  |
| Projects .....                   | 50 |
| Lab Books .....                  | 55 |
| Publications .....               | 57 |

## Summary Information

---

|                                  |  |
|----------------------------------|--|
| <b>Repository:</b>               | Rockefeller Archive Center                               |
| <b>Creator - aut:</b>            | Griffin, Donald R. (Donald Redfield)                     |
| <b>Creator:</b>                  | Rockefeller University                                   |
| <b>Title:</b>                    | Donald R. Griffin papers, Rockefeller University Faculty |
| <b>ID:</b>                       | FA164  |
| <b>Date [inclusive]:</b>         | 1940-1984  |
| <b>Date [bulk]:</b>              | 1940-1984  |
| <b>Physical Description:</b>     | 11.11 Cubic Feet   |
| <b>Physical Description:</b>     | 29 document boxes, including several oversize boxes.     |
| <b>Language of the Material:</b> | English  |
| <b>Language of the Material:</b> | English  |

### Preferred Citation

Information regarding the Rockefeller Archive Center's preferred elements and forms of citation can be found at <http://www.rockarch.org/research/citations.php>

[^ Return to Table of Contents](#)

## Biographical / Historical

---

Donald Redfield Griffin (August 3, 1915 - November 7, 2003)

Donald Redfield Griffin was born in Southampton, Long Island, New York, the only child of Henry Ferrand Griffin and Mary Whitney Redfield Griffin. He attended Phillips Academy in Andover, Massachusetts, and subsequently earned Bachelor of Science (1938), Master's (1940), and Ph. D (1942) degrees from Harvard University. He married twice – to Ruth Castle in 1941 and to Jocelyn Crane (also a scientist) in December 1965. He had four children: Nancy, Janet, and twins Margaret and John. His hobby was sailing. Donald Griffin died November 7, 2003 in Lexington, Massachusetts.

While still in high school, Griffin began an extensive project banding bats in the American Northeast, enlisting friends and area residents to help, and banding over 16,000 bats between 1935 and 1938. (Carolyn A. Ristau, "Donald Redfield Griffin," *Proceedings of the American Philosophical Society*, Vol. 149, No. 3 (September 2005), p. 404.). Bat banding continued over the years, although less intensively. Some banding activities were based at Woods Hole Oceanographic Institution in Massachusetts where his uncle, Alfred C. Redfield, was affiliated (later Associate Director). Redfield was also chairman of Harvard's Division of Biology and was a significant influence on his nephew. Scientific interests ran in the Redfield family. Griffin's great-great grandfather was the first president of the American Association for the Advancement of Science; his great-grandfather was a botanist, and his grandfather was a nature photographer. (Roger Revelle, "Alfred C. Redfield: A Biographical Memoir," Washington, D.C.: National Academy of Sciences, 1995, p. 315.).

**Career** Although known primarily for studying bats, Griffin also researched bird navigation and orientation as well as animal thinking and behavior. While a student, Griffin learned to fly a plane and followed birds in order to better understand their navigation and homing techniques. In the 1930s, some of his bird observation work was conducted from Bowdoin Scientific Station on Kent Island in the Bay of Fundy, New Brunswick. In 1939, he received a summer fellowship at the Huyck Preserve in Rensselaerville, New York and later published journal articles based on his bat banding and research there. Also from the 1930s and into the 1950s, he banded and observed birds in connection with the O. L. Austin Ornithological Research Station in Wellfleet, Massachusetts.

After earning his doctorate, Griffin continued at Harvard as a Junior Fellow, teaching assistant in biology, and research associate in Harvard's Psycho-Acoustic Fatigue Laboratory which had United States military contracts to research ways of improving clothing for cold weather use, among other projects. Part of his government-funded work during the war related to communication equipment research and physiological optics.

In the summer of 1946, Griffin was appointed professor of zoology at Cornell University in Ithaca, New York. While there, he continued pursuing his special interests outside of the university laboratory. In addition to Cornell studies of birds on Bonaventure Island (Quebec, Canada), and Caribou, Maine, he and colleagues took trips to the Bowdoin Scientific Station's Kent Island facility in the Bay of Fundy, New Brunswick, Canada where they studied bird orientation and navigation. In 1952-53, Griffin, accompanied by photographer Dr. Guillermo Zuloaga of Creole Petroleum, studied acoustic orientation of oil birds in Venezuela.

Although Griffin's post-war research from 1947 through 1953 focused more on bird migration patterns, the use of radioactive isotopes in bird tracking, and the physiology of orientation than on bats, he also explored fish hearing and bat radar. Much of his research was conducted for the U.S. Office of Naval Research, primarily in summers, at the Arctic Research Laboratory in Point Barrow, Alaska, and for the Air Force's Arctic Aeromedical Laboratory at Ladd Air Force Base in Fairbanks, Alaska. His Air Force projects in Alaska included investigating the insulating qualities of small mammals' fur.

He returned to Harvard University as professor of zoology in fall 1953 where he was Chairman of the Biology Department 1962-1965. During his time at Harvard, he resumed his studies into bats' use of echolocation, the word coined by him, to determine the size, distance, and location of objects including prey. Outside of his university laboratory, Griffin continued independent research into bat navigation and bird orientation, often at Woods Hole Oceanographic Institution.

In the summer of 1965 he moved to Rockefeller Institute (now University) in New York City and served as their Director of the Institute of Research in Animal Behavior until 1969. His professorship at Rockefeller University was concurrent with a Fellowship from New York Zoological Society. A major project of the NYZS involved periodic visits to the Beebe Tropical Research Station in Simla, Trinidad studying bat visual detection and echolocation and abilities of fish-catching bats. During the late 1960's and 1970's Griffin returned to studies of birds' ability to navigate in clouds when neither the sky nor ground was visible to them for orientation. In his later years at Rockefeller University, he spent more time concentrating on animal cognition and communication.

He retired from Rockefeller University in 1986, and was emeritus professor of animal behavior until his death. In retirement, he continued to research and write, and was an Associate of Zoology with Harvard's Concord Field Station of the Museum of Comparative Zoology.

Honors In 1952 Griffin was elected a Fellow of the American Academy of Arts and Sciences. He was also a fellow of the Animal Behavior Society and a Scientific Fellow of the New York Zoological Society. In December 1978, Griffin became President of the Harry Frank Guggenheim Foundation, and continued for four years. His professional organization affiliations included the American Academy of Arts and Sciences, American Ornithologists Union, American Philosophical Society, American Physiological Society, American Society of Mammalogists, and National Academy of Sciences

Publications Griffin published many articles and books, including *Listening in the Dark* (1958) for which he was awarded the Daniel Giraud Elliot Medal from the National Academy of Sciences; *Echoes of Bats and Men* (1959); *Animal Structure and Function* (1962); *Bird Migration* (1964) for which he won the Phi Beta Kappa Science Prize; *The Question of Animal Awareness: Evolutionary Continuity of Mental Experience* (1976, revised edition 1981), *Animal Thinking* (1984), and *Animal Minds: Beyond Cognition to Consciousness* (1992) .

Scientific Significance In a January 16, 1954 letter to *Scientific American*, Griffin wrote, "The bulk of my research work has centered around the sensory physiology of animal orientation, and this interest grew out of boyhood leanings towards natural history." As a Harvard undergraduate, he and Robert Galambos began monitoring and recording bat sounds using technology developed by physicist G. W. Pierce and methods of Hallowell Davis. This research led to an understanding of echolocation—the term Griffin coined in 1944 to describe bats' ability to navigate around obstacles by using supersonic sounds and the feedback from those. Griffin banded bats into the 1950s which led to new discoveries in bat longevity and migration. He used kite-balloons and planes to study bat and bird navigation. His research into the acoustic orientation of bats was eventually useful in developing aids for blind people. After decades of studying animal navigation, primarily in bats and birds, in the 1970s he began to explore animal thought processes. His pioneering studies on animal communication, behavior in natural circumstances, and learning contributed to the new field of cognitive ethology—the ability of animals to consciously use sophisticated thinking and reasoning in interactions with their environment, humans, and other animals.

[^ Return to Table of Contents](#)

---

## Scope and Contents

---

The majority of the material in this collection is related to Griffin's work as a scientist between the years 1930-1986 and consists of correspondence, records of project activities, lab books, and publications. Some correspondence is in foreign languages, including French, German, and Spanish.

Items of special interest include:

Correspondence with Paul Ehrlich, author of "The Population Bomb";

Correspondence with psychologist B. F. Skinner;

Correspondence with Nobel Prize co-recipients Karl Von Frisch, Konrad Lorenz, and Nikolaas Tinbergen;

A letter to Senator McMahon concerning the use of Atomic material and Manhattan Project;

Support for a fellow scientist, Marcus Singer, under investigation by the U.S. House of Representatives Committee on Un-American Activities;

Correspondence with various manufacturers and scientists about development of specialized equipment--including early computers--to study, record, and film aspects of Griffin's research.

Acronym Key IRAB: Institute of Research in Animal Behavior (RU). NYZS: New York Zoological Society. RU: Rockefeller University. WHOI: Woods Hole Oceanographic Institution.

[^ Return to Table of Contents](#)

---

## Arrangement

---

The Griffin papers are arranged in four series: Series 1 - Correspondence. Series 2 - Projects. Series 3 - Lab Books. Series 4 - Publications.

[^ Return to Table of Contents](#)

---

## File Plan

---

Former Classification: I 450 G875 and I 450 G875-U.

[^ Return to Table of Contents](#)

---

## Administrative Information

---

### Publication Statement

Rockefeller Archive Center

15 Dayton Avenue

Sleepy Hollow 10591

[archive@rockarch.org](mailto:archive@rockarch.org)

URL: <http://www.rockarch.org>

### Conditions Governing Use

The Rockefeller Archive Center has legal title, copyright and literary property right to the collection.

### Conditions Governing Access

Open for research with select materials restricted as noted. Brittle or damaged items are available at the discretion of RAC. Researchers interested in accessing digital media (floppy disks, CDs, DVDs, etc.) or audiovisual material (audio cassettes, VHS, etc.) in this collection must use an access surrogate. The original items may not be accessed because of preservation concerns. To request an access surrogate be made, or if you are unsure if there is an access surrogate, please contact an archivist.

### Processing Information

The collection was partially processed by Alexandra Ward, Rockefeller Archive Center summer intern, August 2012, and Nancy Adgent, RAC archivist, completed advanced processing and finding aid preparation August 2015.

### Immediate Source of Acquisition

Material was donated by the family of Donald R. Griffin, and accessioned by RAC as 1990:008.

[^ Return to Table of Contents](#)

## Controlled Access Headings

- Biology -- Research
- Life sciences
- Zoology
- Animal behavior
- Cell and biomolecular sciences

## Collection Inventory

### Correspondence

#### Scope and Contents

Items include letters to and from other scientists, colleagues, and friends; questions from the general public; requests for peer review of articles; and a few letters from family members. Correspondence with former students and fellow scientists often includes tidbits regarding experiments or projects as well as shared findings. Subject matter ranges from atomic bombs to animal pathology and psychological abilities to employment recommendations for former students and colleagues. A few candid photographs and machine print outs were attached to correspondence and have been left with the correspondence rather than separating such a small number of items and possibly losing valuable context.

#### Arrangement

Alphabetical by name of correspondent.

| Title/Description | Instances |          |
|-------------------|-----------|----------|
| A                 | box 1     | folder 1 |

#### Scope and Contents

Abbott, William S. - advertisement. Adler, Kraig - Cornell University. Adye, Anne Aeschlimann (Mrs. John) - England; bat conditioning . Airapetianz, Er. Sh. - Leningrad University; see also Konstantinov. Alba, Aurelio Malaga - Oficina Sanitaria PanAmericana, Harold Trapido; bats. Alcock, John - Harvard University; Beebe Tropical Station, Simla. Aldrich, Frank W. - bat blood . Alexander, Richard D. - University of Michigan; bird direction. Ali, M. A. - Universite de Montreal; sensory ecology. Allan, Philip F. - University of Michigan; Cape Cod; deer mice. Allen, A. A. - Cornell University. Allen, Cynthia - Harvard University. Allen, Francis H. - Houghton Mifflin; Smithsonian Institution; A. Wetmore. Allen, Glover M. - Museum of Comparative Zoology, Harvard; Journal of Mammalogy. Allen, William H. - Maxwell Air Force Base; migrating bird flight paths. Allison, V. C. - Triumph Explosives. Altes, Richard A. - Science Applications, Inc.; University



of Rochester; bat signals; NASA. Altmann, Stuart - Yerkes Regional Primate Center, Emory University. American Racing Pigeon News - reprints. American Society of Mammalogists - National Zoological Park; U.S. Dept. Agriculture; W. C. Henderson; Science Service; William T. Shaw. Ames, Edward - Wave Hill Center for Environmental Studies. Anderson, A. C. - Canada; bats. Anderson, Anders H. - bat echoes. Anderson, John - Cornell University. Archibald, John G. - animal directional sense. Arnsten, Amy - Brown University; rat communication. Aschoff, Jürgen - Max Planck Institute. Austin, Oliver L., Jr. - Florida State Museum; The Auk, Journal of Ornithology; Nuttall Club. Avery, Michael - North Dakota State University; Lewis Oring; bird auditory sensitivity. AVM Instrument Company - radio telemetry.

---

Able, Kenneth P.

box 1

folder 2

### Scope and Contents

State University of New York, Albany; tracking blindfolded birds; Wallops Island

---

Ba-Be

box 1

folder 3

### Scope and Contents

Bels, P. J. - bat banders in Canada. Ben-Dak, Joseph D. - Janna Lipmanova; Israel; arms control; peace; Palestine; sociology. Bendell, J. F. - Queen's University. Bennett, Glenn E. - Microwave Electronics; pulse compression radar. Benson, Seth - University of California, Berkeley; live bat supplier. Berlin, Charles - Louisiana State University; Communication Sciences Laboratory. Berlinski, David - Columbia University. Bernhard, C. G. - Karolinska Institutet; Beebe Tropical Station; . Bernhard, Silke - Dahlem Konferenzen. Berry, Pat Hoge - UCLA; Queensland; Chillagoe; bat sounds. Bertin, J. - Museum National D'Histoire Naturelle, France; . Bevan, William - Emory University. - . Biemiller, Reynard - Rockefeller University Press. Bigelow, Henry - Museum of Comparative Zoology, Harvard University. Billings, Susan M. - Harvard Medical School; bird navigation; Bay of Fundy; petrels; Trinidad; radio tracking. Bingman, Verner - State University of New York, Albany; sparrow orientation. Biraud, Yvon - Infrarouge Spatial Observatoire, France; Jim Simmons. Bishop, David W. - University of Massachusetts, Amherst; Howard Lovering. Bizony, Michael T. - Harvard University; bird navigation. Blackmore, Michael - Devon Speleological Society, London; bat echo-location. Blake, Charlie - Massachusetts Institute of Technology; radar and birds. Bloch, Don - Denver. Blokpoel, Hans - Canadian Wildlife Service; birds and radar. Blood, Brad R. - Natural History Museum, Los Angeles; bats. Boeing Airplane Co. - Kenneth Hammerle; bat echo ranging. Boell, E. J. - Yale University; Andrew Meyerreicks. Bole, Benjamin P., Jr. - Cleveland Museum of Natural History. Bonaccorso, Frank - University

of Florida; bat banding and tattooing; Panama. Bonner, John T. - Princeton University; Stony Ford Center; birds and radar. Boring, Edwin G. - Harvard University Psychological Laboratory. Borror, Donald J. - Ohio State University; bird auditory localization. Boston Society of Natural History - Clinton V. MacCoy; Bradford Washburn; Arthur Svihla; New England Museum of Natural History. Bottome, Peter - Harvard University. Bourliere, F. - Faculte de Medecine de Paris; physiological telemetry. Bourne, Geoffrey H. - Yerkes Primate Research Center; bat longevity. Bovee, Harley H. - University of Washington; bat eradication. Bowers, Michael - Miami University, Ohio; bat feeding, care. - . Bradbury, Jack W. - University of California, San Diego; Simla; Beebe Tropical Research Station; Edmund Niles Huyck Preserve; Cornell University; Millbrook; Robert Dalglish; caves. Bradshaw, Paul - bat keeping; Adams Bat Bomb. Brantley, James Q. - Cornell Aeronautical Lab.; radar and bats; Doppler effect. Braun, I. H. - Film Associates; bat echolocation.

Bi-Bo

box 1

folder 4

### Scope and Contents

Biemiller, Reynard - Rockefeller University Press. Bigelow, Henry - Museum of Comparative Zoology, Harvard University. Billings, Susan M. - Harvard Medical School; bird navigation; Bay of Fundy; petrels; Trinidad; radio tracking. Bingman, Verner - State University of New York, Albany; sparrow orientation. Biraud, Yvon - Infrarouge Spatial Observatoire, France; Jim Simmons. Bishop, David W. - University of Massachusetts, Amherst; Howard Lovering. Bizony, Michael T. - Harvard University; bird navigation. Blackmore, Michael - Devon Speleological Society, London; bat echo-location. Blake, Charlie - Massachusetts Institute of Technology; radar and birds. Bloch, Don - Denver. Blokpoel, Hans - Canadian Wildlife Service; birds and radar. Blood, Brad R. - Natural History Museum, Los Angeles; bats. Boeing Airplane Co. - Kenneth Hammerle; bat echo ranging. Boell, E. J. - Yale University; Andrew Meyerreicks. Bole, Benjamin P., Jr. - Cleveland Museum of Natural History. Bonaccorso, Frank - University of Florida; bat banding and tattooing; Panama. Bonner, John T. - Princeton University; Stony Ford Center; birds and radar. Boring, Edwin G. - Harvard University Psychological Laboratory. Borror, Donald J. - Ohio State University; bird auditory localization. Boston Society of Natural History - Clinton V. MacCoy; Bradford Washburn; Arthur Svihla; New England Museum of Natural History. Bottome, Peter - Harvard University. Bourliere, F. - Faculte de Medecine de Paris; physiological telemetry. Bourne, Geoffrey H. - Yerkes Primate Research Center; bat longevity. Bovee, Harley H. - University of Washington; bat eradication. Bowers, Michael - Miami University, Ohio; bat feeding, care.

Bra-Bru

box 1

folder 5

## Scope and Contents

Bradbury, Jack W. - University of California, San Diego; Simla; Beebe Tropical Research Station; Edmund Niles Huyck Preserve; Cornell University; Millbrook; Robert Dagleish; caves. Bradshaw, Paul - bat keeping; Adams Bat Bomb. Brantley, James Q. - Cornell Aeronautical Lab.; radar and bats; Doppler effect. Braun, I. H. - Film Associates; bat echolocation. Brebbia, D. Robert - Rockland State Hospital; Neuro-Metabolic Laboratory; bat physiology. Breder, C. M., Jr. - American Museum of Natural History. Brender, Ronald - bat echolocation; sound recording equipment. Brethour, Leslie - birds; Canada. Brickley, Brooks F. - bats in house. Bridgman, Percy Williams (memorial) - Harvard University. Briggs, Shirley A. - Mark Twain misquote. Brines, Michael L. - Rockefeller University; bees; skylight polarization patterns; see also Publications by Others; Journal of Experimental Biology; . British Broadcasting Corporation (BBC) - Gordon R. Taylor; Horizon program participation; bat film. Brosset, A. - Museum National d'Histoire Naturelle; echolocation. Broun, Maurice - birds in clouds. Brown, Patricia - UCLA; bat and bird film; Panama; Trinidad. Browne and Nichols School - . Bruderer, Bruno - Zoologise Astalt der Universitat; birds and radar. Brues, Alice - Aero-Medical Lab, Wright Field.

Buc-But

box 1

folder 6

## Scope and Contents

Buchheister, Carl W. - National Audubon Society. Buchler, Edward R. - ORI, Inc.; University of Maryland; bat flight and foraging; Millbrook. Buckley, Stephen A. - University of New Hampshire; bat echolocation and blind people. Buffalo Museum of Science - G. Bernard Peterson; shrews. Bullock, Ted H. - University of California, San Diego; . Bumeder, George - bird tracking. Bundy, Stephen - summer internship; Groton School. Burda, Hynek - Czechoslovak Academy of Science. Burghardt, Gordon M. - University of Tennessee. Burkhardt, D. - Universitat Regensburg; bat film. Burnett, Miss Frances L. - Mexican bats. Burt, William H. - Museum of Zoology; bat banding. Burton, Tom - bird migration. Buschhorn, Harold - bat purchase. Busnel, Marie-Claire - Universite Rene Descartes; Fyssen Foundation; insect sound. Busnel, Rene Guy - Institut de Recherches Agronomique; Hubert Frings. Butler, E. G. - Princeton University. Butler, Karl D. - Rotary Club. Butterworth, J. Scott - electrocardiograms.

Barnstable Yacht Club

box 1

folder 7

## Scope and Contents

Howard, John G.; Hoxie; Donald Wilson, boat builder

---

Benchley, Nathaniel G.

box 1

folder 8

## Scope and Contents

Phillips Exeter Academy

---

Bloedel, Prentice II

box 1

folder 9

## Scope and Contents

Arizona-Sonora Desert Museum; bats; Panama; Millbrook;

---

Bowles, John B.

box 1

folder 10

## Scope and Contents

Central College; bat detectors; Yucatan, Mexico

---

Ca-CI

box 2

folder 11

## Scope and Contents

Cagle, Fred R. - Southern Illinois Normal University; bat marking. Calderbank, G. - Minister of Agriculture, Bolivia; tracking bats; Trinidad. Caldwell, Morton - University of West Virginia Medical School; McCue-Bertolini bat detector; Covalt-Dunning. Cannon, Barbara - University of Stockholm; intraintestinal metabolism. Caplan, Janet - interview, article about Griffin. Capranica, Robert - Cornell University Langmuir Laboratory; recording sounds. Cardone, V. - New York University. Carpenter, Roger - San Diego State University; bats, flying foxes; Carl A. Richmond; wind tunnel. Carroll, Capt. William - Holland; U.S. Army; P. J. Bels; H. C. Koning. Carter, George F. - comments on bat article. Carter, Howard - University of Chicago; muscles while flying. Castle, Edward S. - Harvard University; M. Bizony; fish research. CBS News - Burton Benjamin; film of program. Ceccaldi, H. J. - Laboratoire de Biochimie et Ecologie, Marseille, France; invertebrate biochemistry. Chadwick, Leigh E. "Chad" - translator of von Frisch book. Chandler, Caroline - obituary. Chandrashekar, M. K. - School of Biological Sciences, India; bat behavior. Chapman, Marjorie - Australia. Chopra, Kuldip P. - Virginia Journal of Science. Christensen, Charles F. - National Geographic film re bats. Christman, Steven P. - U.S. Fish and Wildlife Service, FL; bats. Chudy, J. David - bat pulses; electronic equipment; Africa; J. D. Pye; Leslie Kay. Cisler, David - Wright State University; bats. Clayton, Dale - Tri-Data Biology House; pinlights to see bats.

---

Co-Cu

box 2

folder 12

## Scope and Contents

Cobb, Stanley - Narragansett Marine Laboratory. Coble, Jerry - University of Tennessee Space Institute; owl sound research. Cochran, William W. - Illinois Institute of Natural Resources; bird navigation. Cocke, William A. - bats in house. Cockrum, E. Lendell - University of Arizona; bat homing. Coggeshall, L. T. - University of Chicago; Theodore Bullock; Howard Adelman. Cohen, Elias - Bat Banding techniques; mines. Cohen, Jerome - Northwestern University Medical School; blindness, echolocation. Cohen, Melvin J. - University of Oregon; Harvard University; neuro and sensory physiology. Coles, Richard W. - Washington University; Harvard University; Yucatan; Airstream trailer; Doug Quine. Columbia University - wind tunnel equipment; Herman Galberd. Comins, Derek M. - Kaffrarian Museum, South Africa; . Cone, Clarence D. - Eastern Virginia Medical School; bird navigation in clouds. Cook, Marion - Ooltewah, TN high school; bats. Cook, Richard K. - National Bureau of Standards; acoustics and bird navigation; Woods Hole. Cotzin, Milton - Cornell University; Wesleyan University; psychology; Michael Supa; Karl Dallenbach; navigation of blind people. Coudeyre, Fae-Balle - speech reproduction. Craig, Wallace - bird head position. Creaser, E. P. - Hofstra College; Bermuda; lobsters. Croze, Harvey - Simla; Oxford University; crow search patterns; Serengeti National Park, Tanzania; elephant behavior; Peter Marler; Roger Payne; George Schaller; New York Zoological Society. Crozier, William John - obituary draft; Harvard University. Crumb, A. S. - bats in house. Cullen, J. M. - University of Oxford; bat sounds; Jack Bradbury; Trinidad. Curien, M. Hubert - Centre National de la Recherches Scientifique (CNRS); data gathering equipment. Curtis, Robin L. - New York University College of Medicine; auditory equipment. Cushing, D. H. - Ministry of Agriculture, Fisheries, and Food, England; fish echo location. Cushing, John - CalTech; immunochemistry. Cutler, Preston S. - Center for Advanced Study in the Behavioral Sciences.

---

Cornell University - Zoology Department - General

box 2

folder 13

## Scope and Contents

Laboratory of Ornithology; Dale Corson; Paul H. Geiger, University of Michigan; Schneidman; Van der Kloot; Adelman; Singer; Blight; Barber; Paul M. O'Leary; Hallowell Davis; Robert Galambos; Arthur Schlesinger, Jr.; John Kelleher; Stromberg-Carlson Company; C. W. Torengren Co.; Trails End Zoo; Teiner Engineering Corp.; Alan Van Poznak; Maxine Moore

---

Cornell University - Zoology Department - Projects

box 2

folder 14

## Scope and Contents

Office of Naval Research; Arctic Research Laboratory; bat radar; Etna School; Raymond Hock; Navy Underwater Sound Laboratory; Bonaventure Island Bird Sanctuary; Massa Laboratory; Brush Development Company; General Electric; Perkin-Elmer Corp.; Kalbfell Laboratories; Baird Associates; Teiner Engineering; Polaroid Corp.; University of Michigan; Paul Geiger; Philadelphia Seed Co.; Bell Telephone Laboratories; Francis M. Wiener; Atomic Energy Commission; Photovolt Corp.; Veterans Administration; Canada Department of Mines and Resources; Machlett and Son

---

Curtis, William Edgar

box 2

folder 15

## Scope and Contents

Allegheny College; echolocation; owl vision; Don and Maggie Thompson

---

Curtis, William Edgar

box 2

folder 15a

Conditions Governing Access:

## Conditions Governing Access

Restricted from scholarly access

---

D

box 2

folder 16

## Scope and Contents

Daan, Serge - International Bat Research Conference, Holland. Dalland, John - Wake Forest College; neurophysiology. Daniels, Charles F. - animal skins; Phillips Academy. Davenport, D. - Arthur Redfield. Davis, Bernard D. - Harvard Medical School; behavioral genetics; Woods Hole. Davis, David E. - Rockefeller Foundation-International Health Division; Brazil; birds, bats; U.S. Public Health Service; University of Chicago; Montana State University; Harvard University; Huyck Preserve. Davis, Flora - animal communication book. Davis, Hallowell - Central Institute for the Deaf; animal hearing thresholds. Davis, Joseph A., Jr. - New York Zoological Society; Rockefeller University; see also Harvard Biological Laboratories; Miss Duplaix. Davis, Michael - Cambridge University; Rockefeller Foundation; Roderick Suthers; Harold Trapido; bat sensory channels. Davis, Richard - Johns Hopkins University; bat sound recording equipment. Davis, Richard B. - Texas A and M; portable bat detector. Davis, Russell - University of Arizona; bat echolocation. Davis, W. B. - fowling nets. Dawson, William R. - University of Michigan; New Guinea; Trinidad. Day, G. R. - Meteorological Office, England; bird orientation; Office of Naval Research. Day, Max F. - Australia; Washington University; bee and bird navigation. Deboutteville, Claude Delamare - Museum National

d'Histoire Naturelle; France; bats; fish. Decker, Gary - Rockefeller University applicant. Decu, Vasile - Institutul de Speologie; Romania; LaSalle College. De Geht, V. J. - New York State University-Potsdam; rodent ultrasound. Del Vecchio, Philip J. - Paterson Museum; bird migration; New York Zoological Society. DeSante, David F. - Stanford University; behavioral ecology. Dethier, Vincent - Princeton University; International Ethological Congress. Devlin, Joseph M. - University of Pennsylvania School of Medicine; bat flight and feeding. Devore, Russell - West Virginia University; bird migration. deVries, H. L. - fish inner ear; psychology. Dewsbury, Donald A. - University of Florida; animal behavior; University of Chicago Press. Dice, Lee R. - University of Michigan; sound equipment; Parameters Inc.; Roger Amorosi. Diercks, K. J. - University of Texas-Austin; bat echolocation; Lauren Hutton; animal sonar; Navy. Dilger, William C. - Cornell University; film; parrots. Dill, David Bruce - The Physiologist; University of Nevada. Dinsmore, James - University of Wisconsin; bird capture, transportation; Trinidad. Dorst, Jean - Museum National d'Histoire Naturelle-France. Douglass, John F. - Harvard College; radar of bird migration; Millbrook, New York. Doult, J. Kenneth - Carnegie Museum; bat skins. Downes, M. C. - Papua, New Guinea Dept. of Agriculture; tracking crocodiles. Drake, V.A. - CSIRO; Australia; bird migration. Drury, William - Massachusetts Audubon Society; bird navigation; Tim Williams; Woods Hole. Duckman, Charles - bat food. Duplaix, Nicole - otter behavior; Faculte de Medecine de Paris; Joseph A. Davis. Durbin, Peter - Thomas Barr; bat hibernation; caves. Duryee, William R. - Carnegie Institution; Society of General Physiologists; Cornell University. Dwinell, H. A. - Vermont Department of Agriculture; bats in house. Dwyer, Peter D. - University of Queensland-Australia; bat migration. Dyason, Diana - University of Melbourne; Australia; bat banding.

---

Davis, Wayne H.

box 2

folder 17

### **Scope and Contents**

University of Minnesota; Lincoln Lab, MIT; University of Kentucky; Mammoth Cave; bat banding, vision, homing; Beebe Research Station

---

de Bellard Pietri, Eugenio

box 2

folder 18

### **Scope and Contents**

bat echolocation; birds; National Speleological Society of Spain

---

De Coursey, Patricia and George

box 2

folder 19

## Scope and Contents

bats; squirrels; Harvard University; University of Wisconsin; Trinidad

---

Dijkgraaf, Sven

box 3

folder 20

## Scope and Contents

der Rijks Universiteit, Holland; bat sound and navigation; American Philosophical Society; Spallanzani; von Frisch

---

Dunning, Dorothy

box 3

folder 21

## Scope and Contents

Tufts University; Trinidad; bat lab equipment; Max Planck Institut; West Virginia University; Millbrook; Paul Ehrlich; Jack Bradbury; Peter Marler; Harvard University; Duke University; Virginia Polytechnic; Katherine Ralls; Edwin Gould

---

E

box 3

folder 22

## Scope and Contents

Eads, Richard B. - Texas Dept. of Health; bat banding; rabies. East Meadow Public Library - ultrasound to repel birds; Loretta Kelleher. Eaton, Steve - bird sensory structure. Eddy, Garrett - U.S. Navy; bird homing; Ellie D'Arms; balloon observations; Navy; Japan; radar. Edelstam, Carl - Swedish Natural History Museum; navigation; Edwin Gould; . Edgerton, Harold E. - photography equipment; filming bats; MIT; Trinidad; Panama; Arthur Palme. Ehrenfeld, David W. - University of Florida; turtle orientation; Rutgers University; Barnard College . Ehrlich, Paul R. - butterfly genetics; Beebe Station; New York Zoological Society; Stanford University; . Einramhof, Franz - Austria; bat ultrasound. Eisentraut, Dr. M. - Zoologisches Forschungsinstitut and Museum; Germany; bat banding, homing. Eiskamp, Edward - caves in New York; Eveready batteries; J. M. Mathes Advertising Co.; National Carbon Company. ElectroSignal Laboratory - equipment; smoke detectors. Elishewitz, Harold - bat parasites; Chicago Medical School; caves in Venezuela. Ellins, Stuart R. - University of Delaware; echolocation. Elliott, Robert D. - American Institute of Aerological Research; bird migration. Elwood, R. W. - Queen's University of Belfast, Ireland; animal communication. Emerson, Alfred - University of Chicago. Emlen, John T. - bird navigation; University of Wisconsin. Endler, John - Museum of Vertebrate Zoology; University of California-Berkeley; animal orientation. Energized Materials Corp. - Q-Energy Film; animal pain relief; W. R. Schumacher. Epstein, Samuel - Spallanzani experiments. Erulkar, S. D. - spatial localization; University of Pennsylvania Medical School. Esch, Harald - Notre



Dame University; bees and magnetic field. Evans, L. T. - Montana State University. Evans, Rand B. - Wright State University; bat sounds. Evapograph Consultants - Nicholas Rosner; National Oceanic and Atmospheric Administration. Everest, F. Alton - Moody Institute of Science; bat film. Ewer, R. F. "Griff" - University of Ghana; bats; nectar plants; Nicole Duplaix-Hall. Ewing, Gifford C. - Woods Hole Oceanographic Institution; bird migration. Ewing, Josephine - employment.

---

Emlen, Stephen

box 3

folder 23

### **Scope and Contents**

Cornell University; kytoon equipment; bird tracking, orientation; William Keeton

---

Emsley, Michael G.

box 3

folder 24

### **Scope and Contents**

New York Zoological Society; Trinidad; Beebe Tropical Research Station; Academy of Natural Sciences of Philadelphia;

---

F

box 3

folder 25

### **Scope and Contents**

Fairley, J. S. - University College, Ireland; . Faller, Alan J. - University of Maryland; air flow and birds. Farnell, Frederic James - bats in house. Farner, Donald S. - bird physiology; State College of Washington. Fass, George - films of bats. Faust, R. - Zoologischer Garten; Germany; bat film. Fenn, Roger C. - Fenn School; Bird banding. Ferdinand, Roun - Denmark; Sch. Kjeldsgarde. Fischer, Hans - Universitat Freiburg; Germany; bat larynx. Fischer, Richard B. - Cornell University; World Book Encyclopedia; textbooks. Fish, Marie P. - University of Rhode Island; fish sounds; Office of Naval Research. Fish, William R. - bird isolation chambers; Peter Marler. Fisk, Dr. - reprint request. Fitch, Henry S. - University of Kansas; radioactive tracking of small animals. Fitzgerald, Alan S. - photoelectric instrument. Fitzpatrick, James L. G. - bird flight metabolism; films. Fleming, Bob (and parents) - Nepal; ecology. Fletcher, Laurence B. - Massachusetts Trustees of Public Reservations; Reprints; bird navigation. Flock, Warren L. - radar; University of Colorado; Harvey Savely; Air Force Office of Scientific Research. Forbes, Alexander - U.S. Navy Hydrographic Office. Foreman, G. Lawrence - Rockford college; Bat Stomachs. Foster, Leonard - bats in house; Nova Scotia. Fowler, James A. - George Washington University; bats; National Speleological Society. Fox, Adrian C. - cowbird homing . Francis, Raymond - Williams College; ethology; bird migration; Bowdoin Scientific Station; Kings College; Mt. Desert Biological Laboratory; Woods Hole. Frazer, Trumbull - Yale University; bat migration; bat banding.

Freedman, Sandor J. - ethology; bird homing; Peter Klopfer.  
 Fremer, Glen - Stanford University; bat anatomy; Ada  
 Pye; James Simmons. French, Herbert E. - animal combat;  
 Holiday magazine. Frick, Henry Clay, II - primate ethology;  
 George Scott; Woods Hole Marine Biological Laboratory.  
 Friedhoff, Richard M. - evolution. Friend, Judith - Harvard  
 University; animal physiology; see Lab Books also. Frundt,  
 Hans - echolocation; Institut fur Biophysik and Biotechnik-  
 Germany. Fry, Varian - cat and dog homing; Reader's  
 Digest. Fulcher, W. W. - Murphy High School; reprint  
 request. Fur-Fish-Game, Harding's Magazine - ad by Griffin.

---

Fenton, M. Brock

box 3

folder 26

### Scope and Contents

bats; equipment; Royal Ontario Museum; Carleton  
 University; Edward Buchler; J. R. Roberts; Jim Simmons;  
 Dody Dunning; York University-Canada; Millbrook

---

Fitzgerald, Vera Jean

box 3

folder 27

### Scope and Contents

rats; beavers; cognitive ethology; University of Chicago;  
 William Wimsatt; Millbrook, NY; U.S. Forest Service;  
 South Carolina; Ross Kiester

---

Folk, G. Edgar, Jr. and Sr.

box 3

folder 28

### Scope and Contents

Bowdoin College; Kent Island; Salisbury School; bats;  
 University of Iowa; State University of Iowa; Bowdoin  
 Scientific Station; Harvard Fatigue Laboratory; Richard  
 Penney; H. T. Hammel; Ray Hock

---

Fulbright Scholarship; Cambridge University

box 3

folder 29

### Scope and Contents

University of Cambridge; W. J. Sartain; McGeorge Bundy;  
 H. M. Taylor; J. Gray; J. T. Saunders

---

G

box 4

folder 30

### Scope and Contents

Gaisler, Jud - Czechoslovak Academy of Science. Galler,  
 Sidney R. - NASA; Smithsonian Institution; bird navigation;  
 wildlife monitoring; Woods Hole. Gardner, George - bat  
 detector equipment. Gardner, R. Allen and B. T. (Trixie)  
 - University of Nevada; AAAS. Garnecky, Thomas A. -  
 radar. Garwin, Richard L. - Watson Research Center; IBM;  
 Peter Tyack; Robert Seyfarth; Dorothy Cheney; James L.  
 Simmons; James L. Gould; cognitive ethology. Gaskell,  
 Philip - King's College; birds; blind flying. Gaur, B.S. -  
 University of Jodhpur, India; desert bats. Gehring, Walter

- University of Zurich; bats; radar; birds; Harvey Savely;  
 Air Force Office of Scientific Research. Gershinowitz,  
 Harold - Rockefeller University; Klausner. Geyer, Lynette  
 A. - bat detector; Rutgers University; equipment. Ghose,  
 S. C. - Royal Air Force; Ardente Otological Research  
 Unit; bat echolocation; H. J. Round. Giacalone-Madden,  
 Jacalyn - PhD committee; CUNY. Gibbons, J. Whitfield  
 - Savannah River Ecology Lab; bats. Gibbs, Sarah Poole  
 "Sally" - poetry; McGill University. Gilbert, Perry W. -  
 Mote Marine Laboratory. Giordano, Antonio - Museo civico  
 dei Storia Naturala-Italy; bat sound frequency; Natura.  
 Glass, Brian - Oklahoma State University; bat migration.  
 Gleason, Mabel R. - reprint request . Gleitman, Henry -  
 University of Pennsylvania; Science; blind echolocation;  
 Barbara Landau. Glickenhau, Lee - bat information.  
 Gobert, Andrew - Cornell University; pigeons; George  
 Feliu. Goldman, Peter - Ohio State University; bird song  
 recognition. Goldsmith, Timothy H. - Yale University;  
 birds and ultraviolet light. Goodwin, George G. - American  
 Museum of Natural History; mice skulls. Goodwin, Melvin  
 E. - Emory University; bat sounds. Gordils, Elisa - bats  
 as pets. Gordon, Donald A. - University of Illinois; bird  
 navigation. Gormley, Gerard J. - orcas. Gould, Jim -  
 Princeton University; California Institute of Technology;  
 bird magnetic sensitivity; Jocelyn Crane. Graber, Richard R.  
 - Illinois Natural History Survey. Granath, L. P. - Worcester  
 Polytechnical Institute; sound recording equipment. Gravith,  
 Roryman ? - Karolinska Institutet. Graybiel, Ashton -  
 U.S. Naval Aerospace Medical Institute; sensitivity to  
 acceleration. Great Bear Foundation - Olsen, Lance;  
 animal thinking. Green, Robert M. - Harvard Medical  
 Colloquium. Greenbaum, Joseph J. - Wesleyan University;  
 bat habit retention. Greene, Jerome D. - bat auditory  
 faculties. Greenhall, Arthur M. - Portland Zoological  
 Park; Royal Victoria Institute, Trinidad; Alvin Novick;  
 Panama. Greenwood, George - bat navigation; Panama.  
 Gressley, Gene M. - University of Wyoming archives.  
 Griffin, William Alex - cousin?. Griffiths, Thomas - bat  
 species; University of Massachusetts. Griswold, Mrs. Ely  
 (Edith Caldwell) - moles and mice problems. Groshek, Matt  
 - bat recording equipment. Gruschka, H. D. - University  
 of Tennessee Space Institute; owl sounds. Gunderson,  
 Harvey L. - reprint request . Gunn, W. W. H. - Canadian  
 Wildlife Service; birds and wind turbulence. Gurnee,  
 Russell H. - Explorers Club. Guterman, Leslie - Yale  
 University. Guthrie, Mary J. - University of Missouri; bat  
 banding. Guttman, Norman - Indiana University; animals  
 and magnetic field; shock anticipation.

Galambos, Robert

box 4

folder 31

## Scope and Contents

University of California, San Diego; Army Medical Center;  
 Harvard University Psycho-Acoustic Laboratory; Emory  
 University; bat banding, navigation; Woods Hole; Alan  
 Grinnell; bird tracking; Steven Hillyard; Guggenheim

Foundation; Association for Scientific Workers; Barry  
Commoner; Walter Reed Army Institute; Schwartzkopff;  
Jack Sargent;

---

|                   |       |           |
|-------------------|-------|-----------|
| Gates, William H. | box 4 | folder 32 |
|-------------------|-------|-----------|

**Scope and Contents**

Louisiana State University; caves; supplying bats

---

|                       |       |           |
|-----------------------|-------|-----------|
| Gauthreaux, Sidney A. | box 4 | folder 33 |
|-----------------------|-------|-----------|

**Scope and Contents**

Clemson University; University of Georgia; Louisiana State  
University; bird migration; radar; Kenneth Able

---

|                     |       |           |
|---------------------|-------|-----------|
| Gosline, William A. | box 4 | folder 34 |
|---------------------|-------|-----------|

**Scope and Contents**

University of Hawaii; Woods Hole; Phillips Academy; bird  
banding; fish; Brazil; Natural History Museum, Stanford;  
John Hill

---

|              |       |           |
|--------------|-------|-----------|
| Gould, Edwin | box 4 | folder 35 |
|--------------|-------|-----------|

**Scope and Contents**

Cornell University; Army Chemical Center; Woods Hole;  
turtles; Tulane University; Johns Hopkins University;  
Beebe Tropical Station; Sigma Xi; R. Mertens; George  
Bartholomew; U.S. Army; Panama; Harold Trapido;

---

|                       |       |           |
|-----------------------|-------|-----------|
| Grant, Harold J., Jr. | box 4 | folder 36 |
|-----------------------|-------|-----------|

**Scope and Contents**

Beebe Tropical Research Station; Trinidad; American  
Museum of Natural History; University of Miami;  
Philadelphia Academy

---

|                 |       |           |
|-----------------|-------|-----------|
| Graue, Louis C. | box 4 | folder 37 |
|-----------------|-------|-----------|

**Scope and Contents**

Sacramento State College; bird navigation; Bowling Green  
State University

---

|                             |       |           |
|-----------------------------|-------|-----------|
| Griffin, Donald R. - Family | box 4 | folder 38 |
|-----------------------------|-------|-----------|

**Scope and Contents**

Henry and Mary (parents); Ruth (1st wife); John Hill  
(cousin); Alfred Redfield (uncle); Mrs. Robert S. Redfield  
(grandmother)

---

Griffin, Donald R. - Memberships

**Scope and Contents**

box 4

folder 39

American Academy of Arts and Sciences; American Ornithologists' Union; American Philosophical Society; American Physiological Society; American Society of Naturalists; Explorers Club; Gamma Alpha; National Speleological Society; Sigma Xi; Society of General Physiologists; Society for Neuroscience

Griffin, Donald R. - Miscellaneous

box 4

folder 40

**Scope and Contents**

Guggenheim Fellowship; awards; Committee on Scientific Research Personnel; War Manpower Commission; photograph

Grinnell, Alan D.

box 4

folder 41

**Scope and Contents**

National Institute of Health; bat echolocation; Harvard University; Woods Hole; University College, London; UCLA; Alpha Helix Expedition; Panama; Norman Guttman; Theodore Bullock; Western Reserve University; U.S. Public Health Service; University of Texas;

Grubb, Thomas C., Jr.

box 4

folder 42

**Scope and Contents**

Rutgers University; bird navigation; Kent Island; Beebe Tropical Station; University of Wisconsin; Sigma Xi; John Emlen

Ha

box 5

folder 43

**Scope and Contents**

Haft, Ervin R. - University of California, Berkeley; animal sonar; Acoustical Society. Hailman, Jack P. - University of Wisconsin; bird vision. Hall, George C. - bats in Iowa. Hall, Jens G. - Norway; bat hearing; University of Oslo. Halliman, James E. - Naval Air Missile Test Center; bats, supersonic pulses. Hamburger, Viktor - Washington University; bat film. Hamilton, William H., III - Bird orientation; University of California, Davis; . Hamilton, W. J., Jr. - Cornell University Zoological Dept.; Huyck Preserve; bat droppings. Hamilton-Smith, Elery - Bats; Australia Division of Wildlife Research. Hammel, Harold Theodore (Ted) - Arctic Institute; University of Pennsylvania; Air Force; Cornell University; heat transfer through fur; see Projects-Arctic. Handy, Ned - Milton Academy; bat photos. Harbold, Mary - Temple University; General Motors; bat echolocation measurement. Hardy, James D. - Cornell University Medical College; Ted

Hammel; Arctic Aeromedical Laboratory. Hardy, M. G. - bats; University of Reading, England. Harlow, Harry F. - University of Arizona; primate behavior; Guggenheim. Harrington, Bob - University of New Hampshire; bats. Harris, Norman D. - Boston Museum of Science. Harris, Ron - State University of New York, Stony Brook; roach neurophysiology. Harrison, Tom and Barbara - Cornell University. Hart, Ron W. - Ohio State University; bat, bird longevity. Hartline, H. K. - University of Pennsylvania; spectral energy distribution. Hartline, Peter H. - University of Illinois; Ann Hurley; University of California, San Diego; snake vision. Hartman, Carl - Ortho Research Laboratories; American Society of Zoologists; Ernst Mayr; William Rowan; Henry Yeagley. Hartridge, H. - Medical College of St. Bartholomew's Hospital, Cambridge; bat sounds. Haskell, P. T. - Anti-Locust Research Center, London; bat sound pulses. Haskins Laboratories - Alvin M. Liberman; supersonic sound equipment; Paul Zahl; aids for blind people; military. Hasler, Arthur D. - bat supersonic object avoidance; University of Wisconsin; bats; bees; Von Frisch; American Philosophical Society Magellan Prize; F. P. Moehres. Hatchett, Roy A. - bat navigation; Zoological Society. Hatt, Robert T. - Cranbrook Institute of Science; bats in New Jersey. Hayes, Samuel P. - Perkins Institution; Massachusetts School for the Blind; blindness in humans. Hayman, D. - poem from The Atlantic. Hays, Helen - bird tracking; equipment; American Museum of Natural History; Long Island.

He- Hi

box 5

folder 44

## Scope and Contents

Healea, Monica - Vassar College; bats, supersonics. Hecht, Max - Queens College. Henson, O. W., Jr. - bat tuning , audiograms; Yale University; George Pollak; Al Novick. Heimerdinger, Mary A. - bird homing; Yale Conservation Program; Auk. Heinrich, Bernd - University of California, Berkeley; bee swarms; University of Vermont. Heintzelman, Donald S. - New Jersey State Museum; bird migration; National Science Foundation. Hellwig, Hannelone ? - Cornell University; Germany. Hemenway, Harriett L. (Mrs. Augustus) - bats. Hendrickson, Joe R. - Vanderbilt University; bird homing. Hendryks, Ferdinand - bird navigation. Henning, Otto - Urania Berlin; German. Henson, O. W., Jr. - bat tuning , audiograms; Yale University; George Pollak; Al Novick. Herreid, Clyde F., III - Johns Hopkins University; rabies; Texas. Herschberger, Ruth - bat repellents. Hersh, A. H. - Western Reserve University; bat demonstrations. Hewitt, Edward R. - Hiram Maxim; bat direction hearing. Hickling, Robert - General Motors Research Laboratories; bat echoes; Mary Harbold. Hillman, Herbert - Swarthmore College; assistantship at Cornell University; Scotland. Hind, J. E. - University of Wisconsin; electrical responses to sound. Hinde, Robert A. - Cambridge University Medical Research Council; Ariane Etienne. Hines, C. O. - University of Toronto; birds and gravity

waves; Nature. Hirsch, Jerry - University of Illinois; Animal Behavior Society; Robert Hinde.

Hoc-Hut

box 5

folder 45

### Scope and Contents

Hochbaum, H. Albert - bird banding; Delta Waterfowl Research Station, Canada;. Hockett, Charles S. - Cornell University. Hollander, Peter - Rockefeller University research associate. Hollander, Willard F. - bird navigation; Yale University. H"lldobler, Bert - Harvard University; social insect communication. Holtfreter, Johannes - University of Rochester; bird neuro-anatomy. Hooper, Emmet T. - University of Michigan. Hooper, John H. D. - bat banding; horseshoe bats; England. Hooper, Winifred M. (Mrs. J.H.D.) - bats; caves; National Speleological Society. Hopkins, Carl D. - Cornell University. Hornung, J. L. - photographs for textbook; Walter Hervey Junior College; McGraw-Hill Publishers. House of Travel - Africa travel. Howard, Robert C. - bat orientation; Bell Telephone Labs. Howe, I. A. (Mrs. Edward F.) - bats in house. Howell, Arthur H. - American Society of Mammalogists; bat gender ratio. Howell, Donna J. - Princeton University; Office of Naval Research; bat conference. Hubbard, J. C. - bat sound receptors; Catholic University. Hubbard, Ruth H. - National Research Council reference. Hubendick, B. - Naturhistoriska Riksmuseet, Sweden; bird sound recording. Huddy, Robert C. - homing pigeons. Huff, Jane N. - Michigan State University; mouse sound recording equipment. Hunt, F. R. - National Research Council of Canada; bird-aircraft collisions. Hunt, F. V. - Harvard University Underwater Sound Lab; echolocation. Huntington, Charles E. - bird radio-tracking; equipment loans; see also Projects-Bowdoin Scientific Station; Kent Island; Bowdoin College;. Huntsman, A. G. - bird and fish homing; Fisheries Research Board of Canada. Hutchins, Mrs. - housing issues. Hutchins, Louis - Woods Hole Oceanographic Institute; Cornell University. Hutchins, Ross E. - beetles swimming; Mississippi State College. Hutchinson, G. E. - Yale University. Hutchinson, Ronald - Senator Proxmire; Morton Schwartz; Golden Fleece Awards; Office of Naval Research; Fund to Protect Scholars from Defamation.

Hall, John S.

box 5

folder 46

### Scope and Contents

Albright College; Trinidad; Simla; Beebe Tropical Station; bat banding; University of Illinois; University of Massachusetts; see also Projects-Bat Banding

Harrison, Jean

box 5

folder 47

**Scope and Contents**

Wellesley College; UCLA; bird tracking; DRG research  
associate

---

|  |       |           |
|--|-------|-----------|
| Harvard University Biological Laboratories - General | box 5 | folder 48 |
|--|-------|-----------|

**Scope and Contents**

George Bartholomew; Ernst Mayr; Roger Sperry; Books in  
Biology series; McGeorge Bundy; Biological Council; Paul  
Mangelsdorf; Simonds Steel Mills; George Wald

---

|   |       |           |
|---|-------|-----------|
| Harvard University Biological Laboratories - Operations | box 5 | folder 49 |
|---|-------|-----------|

**Scope and Contents**

NY Zoological Society; Elizabeth Thompson Science  
Fund; WGBH; Israel Institute for Biological Research;  
Massachusetts Institute of Technology (MIT); Shuer  
Brothers; Movie Lab Film Laboratories; J. C. Nicholls, Jr.  
bat supplier

---

|  |       |           |
|--|-------|-----------|
| Harvard University, Fatigue Laboratory | box 5 | folder 50 |
|--|-------|-----------|

**Scope and Contents**

General Electric Co.; James V. Bradley; Aero-Medical  
Laboratory; Sid Robinson; Kent Island; David Bruce Gill;  
Armored Medical Research Laboratory; World War II;  
insulated clothing; William Forbes; Ed Folk; National  
Institute of Health; see also Karl Lashley

---

|                               |       |           |
|-------------------------------|-------|-----------|
| Harvard University - Personal | box 5 | folder 51 |
|-------------------------------|-------|-----------|

**Scope and Contents**

Society of Fellows; academic record

---

|                  |       |           |
|------------------|-------|-----------|
| Hatch, Jeremy J. | box 6 | folder 52 |
|------------------|-------|-----------|

**Scope and Contents**

Duke University; Rockefeller University; National Institute  
of Health; ornithology; Pickvance, T. J.; University of  
Massachusetts; Beebe Tropical Research Station

---

|                |       |           |
|----------------|-------|-----------|
| Heppner, Frank | box 6 | folder 53 |
|----------------|-------|-----------|

**Scope and Contents**

University of Rhode Island; rockets; cloud detector;

---

|                      |       |           |
|----------------------|-------|-----------|
| Hitchcock, Harold B. | box 6 | folder 54 |
|----------------------|-------|-----------|



## Scope and Contents

Middlebury College; University of Western Ontario; bird homing; Office of Naval Research; American Philosophical Society; The Auk; Max Planck Institut; Gustav Kramer; Bates College; Thompson Science Fund; Jeffries Wyman; Signal Corps; see also Projects-Bat Banding

---

Hock, Raymond J.

box 6

folder 55

## Scope and Contents

University of Arizona; Point Barrow, Alaska; Arctic Health Research Center; Arctic Aeromedical Laboratory; University of Iowa; G. Edgar Folk; Cornell University; Point Barrow

---

Huyck Preserve

box 6

folder 56

## Scope and Contents

also see Projects - Huyck Preserve; Thomas Ordway, MD; bird migration; bat banding; Jean Piatt; Robert Dalglish

---

I and J

box 6

folder 57

## Scope and Contents

Ilyichev, Valery - International Congress of Ornithologists. Ingman, Bob - U.S. Army Air Base; Wendover Field, Utah. Institute Fur den Wissenschaftlichen Film - film. Iriarte, Noel Fco. Leyva - bats; in Spanish. Irwin, Howard S. - New York Botanical Garden; Millbrook, NY. Isaacs, John D. - Scripps Institution of Oceanography; H. M. Johnson; Arctic Aero-Medical Lab; Alaska; Ladd Air Force Base. Isenberg, Martin - bats. Jackson, H. H. T. - U.S. National Museum; Southwest War Work. Jackson, V. W. - bats; Chautauqua, NY. Jacobs, Danny Odell - Harvard University; Rockefeller University. Jacoby, V. E. - reprints. Jaffe, Bernard M. - SUNY, Brooklyn. Jameson, E. W. - University of California, Davis; Cornell University; bat echolocation and anatomy. Jansen, Jan - Universitetet I Oslo, Norway; Jens Hall; bat hearing. Jaynes, Julian - Princeton University; animal psychology. Jen, Phillip H. S. - University of Missouri; Goethe Universitat; bat echolocation; equipment; Washington University; Lipmanova; Pollak. Jennings, William L. - Florida Board of Health; rabies; bat ultrasound. Jensen, Mary Jo - bats; Huyck Preserve. Jepsen, Glenn L. - Princeton University; bat fossil. Johnson Controls, Ltd. - M.W. Okinicha; harm to animals from microwave radiation. Johnson, Fred H. - Alaska; University of Illinois; Cornell University. Johnson, Martin W. - bat echolocation; Scripps Institute of Oceanography; Naval Radio Sound Lab. Johnson, Roger - caves; Massachusetts. Johnston, James W., Jr. - radio-carbon tags; Georgetown University School of Medicine. Jolly, Alison - Peter Marler; Rockefeller University; Sussex University. Jones, R. L. - bats in house.

Judd, A. Bradford - Cornell University; King Fahad Ign  
Saud Abdul Aziz; Saudi Arabia; Harvard University.

---

Irving, Laurence

box 6

folder 58

### Scope and Contents

Arctic Health Research Center; Office of Naval Research;  
Barrow, Alaska; Swarthmore College; bird metabolism;  
Woods Hole

---

Ka-Kl

box 6

folder 59

### Scope and Contents

Kaiser, Neva (Mrs. Walter) - animal thinking. Kalmbach, E.  
R. - Howard T. Odum; Yale University; bird migration; U.S.  
Wildlife Research Laboratory, Colorado. Karplus, Martin  
- see also Arctic Research Laboratory; California Institute  
of Technology; Bird Migration. Katsuki, Yafuji - Tokyo  
Medical and Dental University. Kavanau, J. Lee - University  
of California; genetics. Kearns, Mary H. (Mrs. William)  
- bats in house. Keester, Ross - University of Chicago;  
bat detector equipment. Keiser, David S. - bat and pigeon  
homing. Kelemen, George - Bat Larynxes; Harvard Medical  
School; Massachusetts Eye and Ear Infirmary; Mosher Lab.  
Kellerman, Henry - Postgraduate Center for Mental Health.  
Kelley, Edmund S. - Duxbury Yacht Club. Kellogg, Paul P.  
- Cornell University; sound recordings. Kennedy, John S. -  
Imperial College Field Station; bird and insect orientation;  
Woods Hole. Kenney, Robert - ultrasonics. Kerridge, David  
- University of Victoria; Hagmeier. Kiester, A. Ross -  
University of Chicago; bat detector;. King, John - Michigan  
State University; mice behavior. Kinne, Otto - Biologische  
Anstalt Helgoland. Kirk, George L. - bats; caves. Kittredge,  
Henry C. - St. Paul's School; Kent Island;. Kiviat, Erik -  
Bard College; bat survey. Kleerekoper, Herman - Hamilton  
College; McMaster University; physiology and orientation;  
Office of Naval Research; S. R. Galler. Kleese, Deborah -  
rat communication; ultrasonics; Lynette Geyer. Kleinholtz,  
Lewis H. - Reed College; bats; Woods Hole. Klemm, W.  
R. - Texas A and M; book chapter. Klopfer, Peter H. - Yale  
University; tree swallow echo-location.

---

Kn-Ky

box 6

folder 60

### Scope and Contents

Knight, Howard - Weber College; bird navigation. Knipper,  
Helmut - Technischen Hochschule Darmstadt; birds.  
Koch, Arthur L. - Indiana University; turtle orientation.  
Koehler, Glen - bat tragus. Kohls, Glen M. - National  
Institute of Health; Montana; ticks on bats. Kolb, Anton -  
Gesamthochschule; Germany; insect sounds. Koller, Alice  
- National Humanities Center; animal communication;  
ethology. Korsmeyer, F. B. - bat echolocation. Kosciusko,  
Kris - Bates College; Millbrook, NY; Rockefeller University

Center for Field Research in Ecology and Ethology; employee. Kovasznay, Leslie S. G. - Johns Hopkins University; equipment; bat ultrasonic sounds. Kramer, Gustav - Max Planck Institut; Ernst Mayr; bird directionals. Kreithen, Melvin L. - Cornell University; pigeon homing; University of Pittsburgh. Krinsky, Susan G. - Harvard University. Kronenberg, Fredi - Stanford University; mammalian scent making; Katherine Ralls. Krzanowski, Adam - Poland; chiropterology. Kuhl, Patricia K. - University of Washington; speech perception. Kuhring, M. S. - National Research Council of Canada; bird hazards to aircraft; Jacoby. Kulzer, Erwin - Universitat Tubingen; bat larynx. Kunz, Thomas H. - Boston University; monitoring bat flight; Trinidad; Bradbury; U.S. Army Night Vision Laboratory. Kyllingstad, Henry C. - Fort Yates, North Dakota; bird banding. Kyshakevych, R. Y. - oilbirds; Trinidad; Peace Corps; Colombia.

---

Keeton, William T.

box 6

folder 61

### **Scope and Contents**

Cornell University; bird orientation;

---

Kennedy, Donald

box 6

folder 62

### **Scope and Contents**

Woods Hole; National Science Foundation; Syracuse University; frog and fish retina; Stanford University; Harvard Club; Syracuse University

---

Konishi, Mark

box 7

folder 63

### **Scope and Contents**

Venezuela; oilbirds; Princeton University; Trinidad; W. H. Phelps, Jr.; ethology; Cal-Tech; Chillagoe

---

Konstantinov, Aleksei

box 7

folder 64

### **Scope and Contents**

Indiana University; Leningrad State University; James Simmons; Rod Suthers;

---

La-Le

box 7

folder 65

### **Scope and Contents**

Lack, David - Oxford University; bird orientation and sounds. Lackey, Catharine (Mrs. Walter) - bats and articles. Ladenburg, Rudolf - Princeton University; Sound wave photos. Lagemann, R. T. - Emory University; Galambos. Gressley, Gene M. - University of Wyoming archives. Landau, Barbara - blind children's echolocation; University of Pennsylvania; Henry Gleitman. Lange and Springer - in German. Langerholc, John - musical harmony and bat

echolocation. Langmeier, Dave - insect sounds; Haile's Cave; RCA Manufacturing co.. Lansa, Renee (Mrs. Conrad) - bats in house. Larkin, Ron - Illinois Natural History Survey Division; Air Force work; Woods Hole; Fourier transform; Gould; Mueller; honeybees. Kuhl, Patricia K. - University of Washington; speech perception. Larsen, Richard J. - Vanderbilt University; echolocation data. Latham, William H. - Boy Scouts; bat repellents. Laven, Hannes - in German; A.O. Gross, Bowdoin College. Lavender, Tony - sound recordings; see also James Simmons. Leader, Bob - Rockefeller University Laboratory of Animal Behavior; Bill Conway; Gandal; NY Zoological Park. Leavitt, Kent - Innisfree; Stillman and Cagney Estates; Millbrook, NY. Lederberg, Joshua - Stanford University; Richard and Martha Furie; tropical fish; Marilyn Yodlowski. Lee, Edward M., Jr. - bats in house. Lee, James B. - bird migration; Eleonora D'Arms. Leger, Daniel - University of Nebraska; squirrel alarm calls. Leghorn, Kenneth - Phillips Exeter Academy. Lehman, A. Thomas - bats; Union Mutual Life Insurance Company. Leitner, Philip - St. Mary's College; bat altitude; Beebe Tropical Research Station. Leonard, Christiana M. - working paper on women at Rockefeller University; John Raper. Leppik, Elmar E. - Augustana College; pollinating insects. Levi, Wendell M. - The Pigeon; bird orientation. Levine, Elizabeth - Amherst College; bat ovulation. Levine, Jacob "Jack" - Human blindness; Old Farms Convalescent Hospital; soldiers. Lewellen, John - bird navigation; Saturday Evening Post. Lewis, Glenn E. - National Center for Atmospheric Research Computing Facility; computer development. Lewis, Harrison F. - Canada Department of Mines and Resources. Lewis, John - McGill University; bird orientation.

Li-Ly

box 7

folder 66

## Scope and Contents

Licklider, J.C.R. - MIT; Thiessen; Shaw; Journal of Acoustical Society of America. Lidicker, William Z., Jr. - University of California, Berkeley; bat DNA. Lien, Jon - Memorial University of Newfoundland; whale recordings; Chris Spencer; Roger Payne; Peter Tyack. Lillestrand, Robert - General Mills Research Laboratory; Birds and wind currents. Lincoln, Frederick C. - U.S. Fish and Wildlife Service. Lindauer, Martin - Universitat Wurzburg; in German. Linhart, Samuel B. - U.S. Fish and Wildlife Service; bats and rabies. Lippman, Louis - Western Washington State College; bat navigation. Little, Luther - Bat banding; California. Llewellyn, Leonard M. - Virginia Polytechnic Institute; bat banding. Lloyd, James E. - University of Florida; sound equipment. Lockard, Robert B. - University of Washington; textbook. Lord, Frederick T. - bird homing. Lord, Rexford D. - Centro Panamericano de Zoonosis; Argentina; bats. Loregnard, Robert - I.M. Goodbody; University College of the West Indies; Trinidad; . Lorenz, Konrad - Max Planck Institut.

Losee, Margaret - State University at New Paltz, NY;  
caves. Lowery, George H., Jr. - Louisiana State University;  
bird navigation. Luce, E. S. - Custer Battlefield National  
Monument; bats in buildings. Lyman, Charles - Harvard  
Medical School; Museum of Comparative Zoology. Lynch,  
F.C.C - National Development Bureau Canada.

Lashley, K.S.

box 7

folder 67

### Scope and Contents

Yerkes Laboratories; bats and blind veterans; birds; radar;  
Bonaventure Island; Arctic Research Laboratory; Office of  
Naval Research; Point Barrow, Alaska; homing; von Frisch;  
Florida State University; Harvard Fatigue Laboratory;  
Darryl Bruce; Henry Yeagley

Lecture Requests

box 7

folder 68

Lipmanova, Eugenia (Janna)

box 7

folder 69

### Scope and Contents

Konstantinov; Laboratoire de Spectronomie Moleculaire;  
Paris; Leningrad State University; USSR Space Training  
Center; University of Texas; George Pollak; refugee scholar;  
Jewish; Boris Lipmanov; National Institute of Health

Ma-Me

box 7

folder 70

### Scope and Contents

MacDonald, Alister - University of NC, Wilmington;  
Woods Hole; echo fish; Office of Naval Research.  
Mahaley, M. S., Jr. - Cave Temperatures; North Carolina.  
Malins, Donald - National Oceanic and Atmospheric  
Administration; Northwest and Alaska Fisheries Center;  
lipids and sound. Mandriota, Frank J. - Hunter College;  
psychology; pilot. Manery, Jeanne F. - Canada; National  
Defense Research Lab; radiation. Manion, Bruce L. -  
Pretrels; Alpha Helix; New Guinea; San Francisco State  
University. Marchetti, John W. - birds and radar; Air  
Materiel Command; Cambridge Field Station. Marler, Peter  
- Rockefeller University; birds; airplanes; 2 color slides.  
Marley, A. A. J. - McGill University; neurophysiology of  
echolocation. Marsh, Elizabeth Redfield (aunt) - Stockton  
State College. Marshall, John - Peabody Museum; Harvard  
University; Film. Marshall, Wade H. - National Institute  
of Health; animal suffering. Martin, Edward - Texas A and  
I; recording equipment. Martin, Robert L. - University of  
Maine; Bat Research News. Mason, A. G. - bird migration  
routes; Thomas H. Mason and Sons. Mason, C. Russell -  
Massachusetts Audubon Society; airplane study of birds.  
Mason, Edwin A. - bat and gull banding. Massachusetts  
General Hospital - Dr. Lurie; Miss Linden; bat anatomy;  
Mosher Laboratory. Masters, Gene P. - MIT; echolocation.  
Masters, Mitch - University of Oregon; bat sonar tracking;

James Simmons; Anne Moffat. Matuschke, Gunter - bat photo. May, Les - animal sound equipment; Scotland. Mayr, Ernst - American Museum of Natural History; bird banding; Evolution. McCleary, James A. - Northern Illinois University. McCormick, James G. - Naval Undersea Warfare Center; porpoise hearing; Princeton University. McCoy, Dr. - Paper for Walker Prize. McCue, J. J. G. - MIT; Lincoln Lab; signal processing. McGill, Thomas E. - Williams College; Comparative Psychology. McIlhenny, E. A. - homing birds; Avery Island, LA. McIntyre, Judy - University of Minnesota; Kytoons, Kite balloons for bird sounds. McLean, Noel B. - Atlantic Foundation; Woods Hole; George Ruggieri; Osborn Laboratories. McMahon, Senator Brien - atomic energy control bill; Manhattan Project. McMillan, Ann - musician; recorded animal sounds; New York City Urban Corps. Medway, Lord and Lady - University of Malaya. Mellgren, Roger L. - University of Oklahoma; animal cognition book chapter. Menaker, Michael - University of Oregon; University of Texas, Austin; James Simmons; H. F. Guggenheim Foundation. Menaker, Walter - smoking addiction; Rockefeller University; Dr. Schachter; lunar periodicity. Mer, G. G. - Hebrew University; Malaria Research Station, Palestine; bats. Messler, Frank J. - ultrasonic equipment. Meteorological Research Unit - England; instruments on balloons.

Mi-My

box 8

folder 71

## Scope and Contents

Milkman, Roger - University of Iowa; neurobiology. Miller, Howard A. - birds and high frequency sounds. Gobert, Andrew - Cornell University; pigeons; George Feliu. Miller, Mal - School of Aviation Medicine; bat diseases. Miller, Mary - bats in house. Miller, Richard S. - Colorado State University; cowbird migration. Milhovic, Karuche ? - Yugoslavia. Minnich, D. E. - University of Minnesota; Donald Kennedy; Timothy Goldsmith. Mitchell, H. P. - bats for orchard use. Mitchell, M. H. - Canada; fishing bats. Miyahara, Jirokichi - in Japanese; bird orientation. Mock, John E. - State of Georgia Science Advisory Council; kytoons; equipment. Moffett, J. A. - Whitehall Foundation; RU Dept. Biology Advisory Council. Mohler, Irvin C. - American Institute of Biological Sciences. Moldenke, Harold N. - Union County, NJ Park Commission; Doubleday children's book. Molini, Lt. Antino F. - bats; Puerto Rico. Moller, Aage R. - Karolinska Institutet; hearing exhibit; conferences. Moore, A. D. - University of Michigan; animal energy. Moore, Bruce R. - Dalhousie University; bat film. Moore, Clifford B. - Trailside Museum; zoology textbook. Moore, Joseph C. - Everglades National Park; manatee; bats in Florida. Moore, Mrs. Peter L. - animal navigation; crab "radar"; Fortune magazine. Moore, Terris - University of Alaska; bird navigation. Moorehead, Warren K. - Phillips Academy. Moorman, F. Lander - proving God's existence. Morell, L.

E. - bat radar; recording equipment. Morse, Douglass H. - University of Michigan; theory of pecten. Morton, Eugene S. - Smithsonian Institution; bird sound recording. Morton, John M. - bats carrying bedbugs; Philippines; Missouri House of Representatives. Moulton, James W. - Bowdoin College; Woods Hole Oceanographic Institution; Office of Naval Research; fish sound production; Lalor Foundation; Kent Island. Moynihan, Martin - University Museum, Oxford; N. Tinbergen; Gustav Swanson; Cornell University. Moysey, Bob - Saipan bats. Mulcahy, Frances - Visit 4th graders. Muller, Fredrik A. - University of Virginia; bat flight patterns. Munroe, Thomas G. - caving, Buffalo, NY; General Cable Co.. Murman, Mrs. Sydney P. - bats in house. Murray, Bertram G., Jr. - Cornell University; bird navigation. Myers, Richard F. - University of Missouri; U.S. Army. Myres, M. T. - University of Alberta; bird orientation.

---

Markl, Hubert

box 8

folder 72

### **Scope and Contents**

Beebe Tropical Research Station, Trinidad; Indiana University; Zoologisches Institut, Frankfurt, Germany; Zoologisches Institut der Technischen Hochschule; Behavioral Ecology and Sociobiology; Alpha Helix

---

Matthews, G.V.T.

box 8

folder 73

### **Scope and Contents**

University of Cambridge; bird navigation; Wildfowl Trust;

---

McNab, Brian

box 8

folder 74

### **Scope and Contents**

University of Wisconsin; echolocation; Beebe Tropical Research Station; Trinidad; Universidade de Sao Paulo; Rod Suthers; NY Zoological Society; Alpha Helix

---

Meyer, Otto

box 8

folder 75

### **Scope and Contents**

Pigeon Breeding and Training Center; Donald Gordon;

---

Michener, Martin C.

box 8

folder 76

### **Scope and Contents**

pigeon tracking by airplane; Charles Walcott; Education Development Center;

---

Mislin, H

box 8

folder 77

## Scope and Contents

Universitat Basel, Switzerland; Experientia; Cameroon expedition

---

Mohr, Charles E.

box 8

folder 78

## Scope and Contents

Audubon Center; Rockefeller Foundation fellowship; Reading Public Museum; bat homing; bat banding; Academy of Natural Sciences of Philadelphia; P. J. Bels;

---

Mohres, Franz Peter

box 8

folder 79

## Scope and Contents

Dr. Schnitzler; Beebe Station, Trinidad; John Nelson; Alpha Helix; New Guinea; Zoologisches Institut; see Galler, Office of Naval Research; Sid Galler

---

Morse, Philip W. "Pete"

box 8

folder 80

## Scope and Contents

Cleveland Plain Dealer; Bowdoin Scientific Station; friend; bat banding

---

Mueller, Helmut C.

box 8

folder 81

## Scope and Contents

University of Wisconsin; bat conditioning; University of North Carolina

---

N

box 8

folder 82

## Scope and Contents

Nachtigall, Werner - Zoologisches Institut der Universitat des Saarlandes; Germany; birds; infrared viewers. Narins, Peter - University of California, LA; frog sounds; geophones. National Audubon Society - bird-airplane collision. National Educational Alliance - payment dispute. National Research Council - Committee on Biosphere Effects of . . . Radiation; U.S. Navy. National Speleological Society - membership; LeRoy Foote; Delmar Wildlife Research Center. Natuschke, Gunther - Germany; bat bibliography. Nelson, John - University of Queensland; Monash University; Alpha Helix; Trinidad; New Guinea; Australia; echolocation; instruments; Mohres. Nelson, Theodora - bird banding. Nesbit, William - flashlight apparatus; animal photography. Neuhaus, Walter - Universitat Hamburg; bird sound measurement. Neuweiler, Gerhard - Zoophysiolgisches Institut der Universitat Tobingen; Germany. Newbury Lumber and Building Materials - bats in lumberyard. Newcomer, W. Stanley -



Oklahoma A and M; equipment. New Hampshire Nature Camp - Jarvis Hadley; Barnum Museum, Tufts College;. Newton, R.G. - England; bird navigation. New York Academy of Sciences - membership; see also Publishers. Nichols, David Gelston - bats; Groton friend. Nicholls, David G. - Geelong C of E Grammar School; Australia; tracking bird migration with Doppler and satellites. Nickel, Jim - Oklahoma physics teacher. Nielsen, Erik Tetens - Molslaboratoriet, Denmark; American Museum of Natural History; Archbold Expeditions; Office of Naval Research; Florida State Board of Health; Sherwood Hammock Biological Laboratory. Nippon Television Network - Toshio Nakazawa. Nisbet, Ian C. T. - Massachusetts Audubon Society; bird navigation. Noland, Lowell E. - University of Wisconsin. Nordmach, Jan - Karolinska Institutet; Sweden; echo-location. Norris, Kenneth - Marineland of the Pacific; Office of Naval Research; Dody Dunning; Lorenz; Sidney Galler; echo-location; University of California, Los Angeles; Scripps Institution of Oceanography; Norris Nausea Machine; Makapuu Oceanic Center; Hawaii. Nortan, Arthur H. - Portland Society of Natural History; Maine. Northington, Captain Page - Department of Navy; bird homing; streptomycin. Novick, Alvin - Harvard University hospital; Yale University . Nowicki, Stephen - bird communication; Rockefeller University. Nuttall Ornithological Club - Oscar Root; Brooks School; Museum of Comparative Zoology; New England Museum of Natural History; Wendell Taber; . Nyquist, Alfred W. - Caves; Finger Lakes region of New York; O. D. von Engeln; Cornell University.

---

National Academy of Sciences

box 9

folder 83

### **Scope and Contents**

Orson Eaton; Secretary of the Interior; C. B. Morton;  
Bureau of Sports Fisheries and Wildlife

---

National Geographic Society

box 9

folder 84

---

National Science Foundation

box 9

folder 85

### **Scope and Contents**

evaluation of proposals; Agency for International  
Development; India;

---

New York Zoological Society

box 9

folder 86

### **Scope and Contents**

see also Emsley, Michael; membership;

---

O

box 9

folder 87

## Scope and Contents

Oaks, Emily C. - Utah State University; sound recording equipment. O'Brien, John P. - Marquette University; bat suppliers. Odend'hal, Stewart - University of California-Davis; . Odum, Eugene P. - University of Georgia; Huyck Preserve. Odum, H. T. - Duke University; radar; Yale University. Ojasti, Juhani - Universidad Central de Caracas; Venezuelan bats and birds. O'Kelley, T.G. - rabbit supplier. Olive, Jeannie and Lindsay - University of North Carolina; duck heart rate. Oliver, James - bird's eye capabilities. Onion, Daniel K. - sound equipment; deer; New Hampshire; Maine; Harvard University. Organization for Tropical Studies - J. T. Spencer; Costa Rica; Fernando Nottebohm. Oring, Lewis - bird migration and calls; University of North Dakota; Michael Avery. Orr, Robert T. - California Academy of Sciences; bat sounds; equipment.

---

O'Mahony, Eugene

box 9

folder 88

## Scope and Contents

James S. Fairley; Irish mammalogists; National Museum of Ireland; photos;

---

Osgood, Frederick L., Jr.

box 9

folder 89

## Scope and Contents

mammalogist; Vermont; caves; bat banding

---

P-Q

box 9

folder 90

## Scope and Contents

Packard, Fred - bats, caves; Austin Ornithological Research Station; Harvard; National Park Service; Olympic National Park; . Painleve, Jean - Institut de Cinematographie Scientifique; film. Painter, Ben - Armstrong Junior College; Georgia; birds. Palmer, Ralph S. - seal meat; foxes; U.S. Naval Reserve; Vassar College. Park, Mrs. Francis E., Jr. (Catherine) - bat counting. Parker, John G. - Wisconsin; bats. Parkes, W. Raymond - Liverpool University Medical School . Payne, Charles L. - ultrasonic whistle. Payne, Fernandez - University of Indiana; echolocation; Walter Hahn. Pear, C. B., Jr. - Washington Institute of Technology; homing pigeons . Pendexter, Ursula - bats in house. Penney, Richard Lee - Iowa; Rockefeller University Institute for Research in Animal Behavior; penguins; Beebe Tropical Research Station; New York Zoological Society; U.S. Department of Agriculture. Pennington, Anthony J. - Princeton Engineer; article; Brush Recorder. Pennoyer, F. W., Jr. - bat sound reproduction; Naval Air Material Center. Pennsylvania, Commonwealth of - Department of Health; rabid bats; Ernest J. Witte. Pennycuick, Colin V. - Bristol University; wind tunnel; Ransome. Pepperberg, Irene Maxine - Purdue University; bird communication;

H. F. Guggenheim Foundation. Perdeck, A. C. - radar equipment for tracking birds; Radio Research Instrument Co.; Netherlands. Perry, Tom L., Jr. - Harvard friend; caves; bats; Oxford. Peterson, Roger Tory - personal papers. Peto, H. R. - boat in Maine. Pettit, T. - Hunter Mountain property (Catskills); bird navigation. Phillips, W. W. A. - Tonacombe Group; Ceylon. Phipps and Bird Inc. - laboratory equipment supplier. Pielemeier, W. H. - Pennsylvania State College; bat sound measurement. Pierce, G. W. - Harvard University Physics Dept.; bat sounds and equipment; Fazil Khan. Pike, Oliver G. - echolocation; Nature article; England; photography. Pinchot, Gifford B., M.D. - airplane tracking; bird navigation. Pincus, G - Clark University; bat observations; Dr. Werthesen. Pitcairn, Lachlan and Mrs. Raymond - Tonshi Mountain property (Catskills); night bird migration sounds. Platt, C. S. - Agricultural Experiment station, New Jersey; Rutgers University; pigeons. Player, Jonathan - Guyana caves; England. Pobowski, Miss G. - bats. Poduschka, Walter - Austria; hedgehog sounds; equipment; Volkswagen Foundation. Pollak, George - Yale University; reference; bats. Pope, Alton S., M.D. - Dept. of Public Health, Massachusetts; bats, moles. Post, William - Caribbean Primate Research Station; Puerto Rico. Pratt, David - Harvard University; Woods Hole; . Pratt, John G. - Duke University; parapsychology; pigeon homing; Office of Naval Research; Ursula Von St. Paul; . Preble, Norman A. - University of Kansas; bat banding. Prescott, Hubert W. - Montana; shrews. Presti, David - University of Oregon; birds; geomagnetic fields. Pribram, Karl H. - Stanford University; Yerkes's Primate Research Center; . The Princeton Engineer - Anthony J. Pennington; bird sonar and military radar. Pronko, N. H. - University of Wichita; bird navigation. Pumphrey, R. J. - University of Liverpool; pulse in larynx. Quantico Post School - Marjorie Molyneaux; biology class request. Quine, Doug - Dalhousie University; Rockefeller University.

---

Palme, Arthur

box 9

folder 91

### Scope and Contents

bat banding; Mount Greylock State Reservation  
Commission; Massachusetts

---

Papi, Floriano

box 9

folder 92

### Scope and Contents

Universita di Pisa, Italy; ultrasonic equipment; bird  
navigation; smells in pigeon homing; Rhodes University

---

Parker, Henry M.

box 9

folder 93

**Scope and Contents**

WWII letters; Harvard friend; Germany; France; Signal  
Pigeon Company

---

|                 |       |           |
|-----------------|-------|-----------|
| Payne, Roger S. | box 9 | folder 94 |
|-----------------|-------|-----------|

**Scope and Contents**

Cornell University; ornithology; Office of Naval Research;  
Museum of Natural History; Audubon Society Station;  
Rockefeller University; whales; Argentina

---

|                   |       |           |
|-------------------|-------|-----------|
| Pearson, O. Payne | box 9 | folder 95 |
|-------------------|-------|-----------|

**Scope and Contents**

bird flight; Swarthmore College; University of California,  
Berkeley; Elizabeth Levine; Colombia;

---

|             |       |           |
|-------------|-------|-----------|
| Perry, Clay | box 9 | folder 96 |
|-------------|-------|-----------|

**Scope and Contents**

caving; bat banding; Arthur Palme; Massachusetts; National  
Speleological Society;

---

|                         |       |           |
|-------------------------|-------|-----------|
| Phelps, William H., Jr. | box 9 | folder 97 |
|-------------------------|-------|-----------|

**Scope and Contents**

Venezuela birds and bats; de Bellard; Creole Oil

---

|                               |        |           |
|-------------------------------|--------|-----------|
| Publishers -Doubleday and Co. | box 10 | folder 98 |
|-------------------------------|--------|-----------|

**Scope and Contents**

Educational Services Inc.; Physical Science Study  
Committee; Massachusetts Institute of Technology; Bird  
Migration; Echoes of Bats and Men; Orientation of Bats;  
Natural History Press;

---

|                                 |        |           |
|---------------------------------|--------|-----------|
| Publishers - Dover Publications | box 10 | folder 99 |
|---------------------------------|--------|-----------|

**Scope and Contents**

Listening in the Dark; Bird Migration; Doubleday; Yale  
University Press

---

|                                |        |            |
|--------------------------------|--------|------------|
| Publishers - MacMillan and Co. | box 10 | folder 100 |
|--------------------------------|--------|------------|

**Scope and Contents**

Nature

---

|                                  |        |            |
|----------------------------------|--------|------------|
| Publishers - National Geographic | box 10 | folder 101 |
|----------------------------------|--------|------------|

---

|                    |  |  |
|--------------------|--|--|
| Publishers - Other |  |  |
|--------------------|--|--|

**Scope and Contents**

box 10

folder 102

Academic Press; American Journal of Physics; American Scientist; Anima; Arete Publishing Company; ASP Biological and Medical Press; Bird-Banding; Birkhauser Boston, Inc.; Book of Knowledge; William C. Brown Co.; Bulletin of Museum of Comparative Zoology; Cambridge University Press; Richard Carrington; Cornell University Press; Ecology; Editions VDB; Encyclopedia Britannica; Euclides; W. H. Freeman and Company; Greenwood Press; Grolier Society; Harper's Magazine; Harrow House; Harvard University Press; D.C. Heath and Co.; Houghton Mifflin Co.; Hunter-Trader-Trapper; Journal of the Acoustical Society; Journal of Experimental Zoology; Journal of Mammalogy; Alfred A. Knopf; Little, Brown and Co.; Hugh C. MacLean Publications; McGraw-Hill Book Co.; Natural History Press; Neuroscience and Biobehavioral Reviews; W. W. Norton and Co.; Oxford University Press; Perspectives in Biology and Medicine; Physiological Reviews; Popular Science; Progress in Physiological Psychology; Quarterly Review of Biology; Reader's Digest; W. B. Saunders Co.; Schenkman Publishing Co.; Science; University of Chicago Press; John Wiley and Sons; Yale University Press

Publishers - Reviews by Griffin

box 10

folder 103

**Scope and Contents**

Academic Press; American Weekly; The Auk; Behavioural Processes; Bird-Banding; Cambridge University Press; Dodd-Mead and Co.; E. P. Dutton; Ecology; Holiday House; Journal of the Acoustical Society of America; Journal of Comparative Physiology A; Journal of Experimental Zoology; Journal of Mammalogy; Journal of Theoretical Biology; Journal of Wildlife Management; Natur Wissenschaften; National Geographic; Nature; New York Academy of Sciences; Oxford Companion to Animal Behavior; Plenum; Psychological Bulletin; Princeton University Press; Royal Ontario Museum; W. B. Saunders Co.; Science; Scientific American; Smithsonian; Stanford University Press; John Wiley and Sons; Wilson Bulletin

Publishers - Scientific American

box 10

folder 104

**Scope and Contents**

bird migration; Creole Petroleum; oil birds; Venezuela; Discovery; Vision

Publishers - Time-Life

box 10

folder 105

## Scope and Contents

Nina Leen; Animal Behavior; Beebe Tropical Research Station; Trinidad; Harvard University; New York Zoological Society; William H. Stiles; Cornell University

---

Pye, J. David

box 10

folder 106

## Scope and Contents

Institute of Laryngology; England; bat recordings; Trinidad; University of London; Kings College; ultrasonic; Queen Mary College; Scientific American; C. L. Stong; Air Force Office of Scientific Research

---

Ra-Ri

box 11

folder 107

## Scope and Contents

Rabin, Aaron - Rockefeller University; chemical senses. Rabor, D. S. - Silliman University; Philippines; caves in Mindanao. Racing Pigeon - publisher; supplier. Rainey, Dr. - Centre for Overseas Pest Research; London; Alison Steedman; bird migration. Ralls, Katherine - Kenya; New York Zoological Society; Uganda; Tanzania; Museum of Natural History; Smithsonian Institution; Millbrook. Rand, Austin L. - National Museum of Canada; bats. Randolph, Howard S. F. - bats in hair. Ransome, Roger D. - England; Bristol University; bat biology. Rao, K. Pampapathi - Andhra University; India; mussels;. Raper, John - Harvard University; women biologists; Christiana Leonard; Rockefeller University women status. Raspet, August - Mississippi State College; sailplane for research; bird migration. Raup, Hugh M. - Harvard University; forests; . Rayment, Robert - Meteorological Research, Royal Air Force; England. Raytheon Co. - Satellite Wildlife Research Program; biotelemetry study; radio tracking; Lester Garvin; W. Cochran; R. Suthers. RCA Laboratories - P. N. Yocom; transducer improvements; radar equipment. Rea, E. M. - bats in auditorium, New Orleans; Mardi Gras floats. Reed, Sheldon - University of Minnesota recruiting. Reille, Antoine - Laboratoire de Neurophysiologie, Paris; bird navigation. Reisman, Ron - University of Pennsylvania; psycholinguistics. Renn, Charles Easterday - Elisabeth Sheffield. Renshaw, Birdsey - University of Oregon Medical School . Research Center for Language and Semiotic Studies - Indiana University; Thomas Sebeok. Reuland, J. E. - R. M. Fasanella; Yale University School of Medicine; bird navigation. Rice, Charles E. - Stanford Research Institute; Kenyon College; echolocation. Rice, William R. - University of California, Davis; acoustical location of prey; . Richard, P. B. - beavers; publishing in English; Paris. Richardson, W. John - Cornell University; weather and bird flight; Millbrook. Richey, M. W. - Royal Geographical Society; England. Riggs, Austen - bird homing; effects of lights and aircraft on birds; University of Texas. Riggeih, Austen Fox - Cambridge, Massachusetts;

bird homing. Ripley's Believe It or Not - erroneous publication. Ripley, S. Dillon - Peabody Museum of Natural History; Smithsonian Institution; Beebe Tropical Research Station. Ripon College - Wisconsin; commencement speech. Riss, Walter - Down State Medical Center; NY.

---

Ro-Ry

box 11

folder 108

### Scope and Contents

Roberts, Brian - Scott Polar Research Institute; England; Antarctic birds. Robinson, Robert A. - Johns Hopkins Hospital; bat bones. Rockefeller Foundation - Dr. Pratt; Bellagio. Rocky Mountain Biological Lab - 1980 forms (blank). Rodriguez-Teijeiro, Jose D. - bird echolocation; Universidad de Barcelona. Roeder, Kenneth D. - Tufts University; film; moth ultrasonic receptors. Roer, Hubert - Zoologisches Forschungsinstitut; Germany; bat banding. Roffey, Jeremy - Centre for Overseas Pest Research; England; bird migration; insect radar. Rogers, Mary Ann - Woods Hole Oceanographic Institute; Cornell University. Romeyn, J. A. - University of Alberta; Canada. Rose, Jerzy E. - John Hopkins University School of Medicine; live bats for neuro-anatomical study. Rose, William B. - Harvey Society lecture. Rosenblatt, Jay S. - Rutgers University; U.S. Ethological Conference Committee; Dr. Marie Luise Leder; City College. Rosenblum, Ann M. (Mrs. Murray) - bats in Mahopee, NY house. Rosenthal, Gerson M., Jr. - University of Chicago; birds and wind, climate effect. Ross, A. - Arizona Western College; bat food habit studies. Rostron, B. T. - bat vocal organs. Rouk, C. Stanley - Baylor University; bat stomach contents. Round, H. J. - bat sounds, microphones; England. Rowan, William - University of Alberta; Canada; bird migration and daylight; Lowell Institute; Biological Reviews. Rutschmann, J. - high frequency sound; NY State Psychiatric Institute. Rysgaard, George N. - University of Minnesota; Kellogg Bird Sanctuary; bird banding.

---

Rawson, Kenneth

box 11

folder 109

### Scope and Contents

Max Planck Institute; bird orientation and time sense; University of Wisconsin; Arctic Aeromedical Laboratory; Swarthmore College; George Scott; Oberlin College; National Science Foundation; Gustav Kramer;

---

Redfield, Alfred

box 11

folder 110

### Scope and Contents

see Griffin, Donald R.-Family for personal correspondence; von Frisch; Woods Hole Oceanographic Institution; K. S.

Lashley; Pete Scholander; van Dam; Arctic Aeromedical  
Laboratory; Air Force

---

Robinson, Doug and Sarah

box 11

folder 111

### **Scope and Contents**

Cornell University; flight acoustic data; Skillman State  
Village; New Jersey

---

Robinson, Peggy

box 11

folder 112

### **Conditions Governing Access:**

### **Conditions Governing Access**

Restricted from scholarly access.

---

Rockefeller University - Laboratory of Animal Behavior

box 11

folder 113

### **Scope and Contents**

Armin Braun; Bucknell University; computer development;  
Dukane Corp.; Duke University; Dody Dunning; Eisenberg;  
Owen Floody; General Radio Co.; Grass Instrument Co.;  
Holgate detector; Jalbert Aerology Laboratory; Knowles  
Electronics; Bob Leader; Christiana M. Leonard; McGeorge,  
Lee; Millbrook, NY; Nantucket Kiteman; NBC television  
program on aggression; Carl Pfaffmann; David Pye;  
Randolph Air Force Base; Robert Schoenfeld; Frank Stubbs;  
Westinghouse Electric Corp.; Timothy Williams;

---

Sa-Sd

box 11

folder 114

### **Scope and Contents**

Sachs, Murray B. - Johns Hopkins University School of  
Medicine; pigeon nerve system. Saint Cyr, Edith - Nevada;  
teacher; bats and apples. Salmon, Michael - University of  
Illinois; bat film. Sanborn, Colin Campbell - Field Museum  
of Natural History; bat skins; lecture. Sanderson, Glen C. -  
Illinois Natural History Survey; Frank Bellrose; University  
of Illinois. Sandusky, O. E. - bat memo. Sanford, Thomas  
B. - Woods Hole Oceanographic Institution; birds and  
electro-magnetic fields. Santa Cruz, Pat - bats in attic.  
Sarles, Harvey B. - University of Minnesota; Harry F.  
Guggenheim Foundation. Saunders, Frederick A. - Mt.  
Holyoke College; bird banding. Scarlett, William and Leah  
- Bonaventure Island; photographs of gannets. Schaps,  
Gary L. - bird migratory behavior; Washington University;  
Suga. Schilling, Harold K. - Pennsylvania State College;  
bat ultrasonic waves; high frequency sounds; equipment;  
larynx. Schleidt, Wolfgang - Max Planck Institute; Rawson;  
equipment. Schneider, Hans - Zoologisches Institut;  
Germany; bats catching insects; bat film. Schneirla, Ted C.  
- American Museum of Natural History; von Frisch film;  
Wilner Films and Slides; Alden Potter; E. J. Mauthner.  
Scholander, Per Frederick "Pete" and Susan - Swarthmore



College; Alpha Helix; Point Barrow, Alaska; Woods Hole;  
 U.S. Air Force; fur insulation properties; Knut Schmidt-  
 Nielsen; diving animals. Schuck, O. H. - Minneapolis-  
 Honeywell Regulator Co.; acoustic orientation. Schuz, Ernst  
 - Kaiser Wilhelm Gesellschaft; Germany; bird navigation.  
 Schwab, John L. - U.S. Chemical Corps; Camp Detrick,  
 MD; Biological Dept.. Schwartzkopff, J. - Universitat  
 Gottingen; Germany; bird wing sensitivity; Ruhr-Universitat  
 Bochum. Schweitzer, Jeff (and father John) - Paleontology;  
 American Museum of Natural History. Scichtman, M. -  
 Bayside High School (NY); bat food. Scott, George T. -  
 Bermuda Biological Station; NY; U.S. Army Air Force .  
 Scott, John Paul - Roscoe Jackson Memorial Laboratory;  
 Committee for Study of Animal Societies; bird navigation;  
 von Frisch. Scott, Oliver - traps; mice; Barnstable. Scott,  
 Peter - Wildfowl Trust, England; Jeremy Hatch; birds and  
 thermal currents. Scribner, Kimball J. - Explorers Research  
 Corp.; bird orientation; aviation research.

Se-Sm

box 11

folder 115

## Scope and Contents

Seaman, Arlene R. - NY State University; bat and bird  
 retina; Michigan State University; Beebe Tropical Research  
 Station; Trinidad; New York Zoological Society. Sears,  
 W. R. - bumblebee flight; Northrup Aircraft; Journal of  
 Aeronautical Sciences. Sebeok, Thomas A. - East-West  
 Center; animal communication book; Research Center for  
 Language Sciences. Segedin, George J. - reference; Kaiser  
 Engineers. Selander, Robert K. - spectrographs of cave  
 swallows; University of Texas, Austin. Semple, John B. -  
 Geographic article re bats. Sessions, Jack - poetry. Setlow,  
 R. B. - DNA and life span; Oak Ridge National Laboratory.  
 Seyfarth, Robert and Dorothy Cheney - monkeys in Africa;  
 UCLA; University of Pennsylvania; see also Richard  
 Garwin. Seymour, Christopher J. - bats as pets. Shaffer,  
 Chester M. - bats in West Virginia. Shalter, Michael -  
 Ruhr Universitat Bochum; bird echolocation; Germany.  
 Shapovalov, Leo - California Division of Fish and Game;  
 fish homing; Natural History Museum. Shaw, Henry S. -  
 bird homing; Huyck Preserve; General Radio Co.; Kent  
 Island. Shaw, Neil A. - Argonne National Laboratory;  
 Woods Hole; bird radar; University of Melbourne;  
 PLESSEY; acoustic sounders. Shea, John Bernard -  
 National Geographic article re bats. Sheahan, Terence G.  
 - National Geographic article re bats. Sheldon, Walter H. -  
 Emory University School of Medicine; bats for experiments.  
 Shelley, Lewis O. - bat colonies. Sherman, Frederick G. -  
 Brown University; Kennedy; Goldsmith; Novick. Sherman,  
 H. B. - University of Florida; bat food; cages; NIH grant; bat  
 banding. Shilling, C. W. - George Washington University;  
 bat sonar; see also U.S. Office of Naval Research. Shull,  
 A. Franklin - University of Michigan; flying bat photo.  
 Shy, Eyal - Hebrew University of Jerusalem; graduate  
 student application. Sibley, Charles C. - Cornell University;  
 ornithology. Sikkell, P. P. H. - bat eradication; architects;

South Africa. Sikorsky, Igor - Vought-Sikorsky Aircraft Corp.; helicopters to observe birds. Silva, Gilberto - bats in Cuba; Instituto Nacional de Reforma Agraria. Simon, James R. - Jackson Hole Wildlife Park; pelican research. Simpson, Myron L. - Johns Hopkins University; bats for experiments. Skinner, B. F. - pigeon visual recognition; bird radar; Indiana University; psychology; war work. Skinner, Dorothy M. - Oak Ridge National Laboratory; Woods Hole; bird navigation; . Skoryna, Stanley - McGill University; bat echolocation. Slocum, Lloyd V. - Woods Hole; Charles and Libby Marsh; Pennsylvania State University; electrical engineer. Small, S. N. - bats. Smith, Alpheus W. - Ohio State University; bat supersonic sounds; photograph for physics textbook. Smith, James Dale - University of Kansas; bat acoustics; California State University; Trinidad; Venezuela; Holgate detector. Smith, Jane C. - Queen Mary College; London; use of image in article. Smith, Jeri D. - bat spiraling. Smith, G. Maskill - New Zealand Scientific Liaison Office; birds and supersonic sound. Smith, Ralph and Todd (wife) - Aviation Medicine; U.S. Air Force; University of California-Berkeley; Payne Pearson; University of Glasgow; Scotland; Aviation Medicine, Randolph Field, Texas; . Smithsonian Institution - National Zoological Park; Ernest P. Walker; bat supply; films; A. Wetmore. Smullin, David - Alaska; job assistance. Smyth, Dermot M. - James Cook University of North Queensland; Long Pocket Laboratories; Australia.

Sn-Sz

box 12

folder 116

## Scope and Contents

Snake King - supplier of birds and animals; Texas. Snow, Edward R. - Sable Island fauna; Massachusetts. Snow, Thomas J. - translator of Russian publications. Snyder, Russell L. - Physical Oceanographic Laboratory, Nova University; bird navigation; whitecap sounds; Torre-Bueno. Solomon, Richard L. - Harvard University Laboratory of Social Relations. Spaet, Bernate - Cornell University student; Columbia University. Spear, Philip J. - National Pest Control Association; rats and ultrasonic noise. Speidel, Carl C. - University of Virginia; films. Sperry Gyroscope Company - bird navigation; navigating instruments. Speirs, J. Murray - bird navigation; meteorology; Ontario, Canada. Stabler, Robert M. - University of Pennsylvania; owls; Philadelphia Zoological Garden. Stack, C. R. - bird hearing; infrared light; Instituto Neurologico de Colombia; Jaime Gomez. Steel, Liza - bird equilibrium. Stein, David - bat detectors; Argentina; New York Zoological Society. Stetson, Harlan T. - homing pigeons and radio waves; U.S. Signal Corps. Stewart, James L. - Naval Electronics Laboratory; bats and echoes. Stewart, K. R. - high frequency sound waves. Stewart, Rodney Mason - poem. Stewart, Walter - Rockefeller University; National Institutes of Health; wildfire toxin. Stiles, Mabel - banded bird . Stokes, Allen W. - Trinidad; Tobago; birds. Stone, G. C. "Didi" - Harvard University; film. Stone, Jeannette Galambos - Vassar

College; Sarah Lawrence College. Stone, L. S. - Yale University; film. Stong, C. L. - ultrasonic sounds of bats; Scientific American; David Pye; circuit amplifier. Storrs, Eleanor E. - Gulf South Research Institute; armadillos. Straw, Richard M. - insect versus human eyes; Rancho Santa Ana Botanic Garden. Streicher, Eugene - University of Chicago; bird navigation; see also U.S. Army Chemical Center. Strelkov, P. O. - Academy of Sciences; Leningrad, Russia. Stresemann, Erwin - Zoologisches Museum; Germany; bird orientation. Strohl, I. - bats; Switzerland; Zoological Institute. Strong, Susie - friend. Strupp, Barbara - Cornell University. Stuart, Alastair M. - National Institutes of Health; Australia; . Suga, Nobuo - Washington University; DRG research associate; Rockefeller University. Summers, D. M. - University of Victoria; bird eyes. Supa, Michael - International Business Machines; experiments with blind. Svendsen, Gerald E. - Ohio University; pika and hay. Swan, Lawrence W. - San Francisco State College; radar bird watching in India. Swarthmore College - Honors examiner; L. R. Shero.

---

Schaefer, Glen W.

box 12

folder 117

### **Scope and Contents**

England; University of Technology; bird migration; New Brunswick, Canada; radar; Woods Hole

---

Schmidt-Koenig, Klaus

box 12

folder 118

### **Scope and Contents**

Universitat Tubingen; bird navigation

---

Schmidt-Nielsen, Knut

box 12

folder 119

### **Scope and Contents**

University of Cincinnati; sensory physiology; Duke University; Pete Scholander

---

Schnitzler, Hans- Ulrich

box 12

folder 120

### **Scope and Contents**

Zoophysiological Institut; Tubingen; Germany; Alvin Novick; Yale University; Rockefeller University; National Science Foundation; bat echolocation; James Simmon; New York Zoological Society; Trinidad; J. W. Goethe Universitat

---

Simmons, James

box 12

folder 121

### **Scope and Contents**

Acoustical Society of America; bat echoes; Beebe Tropical Research Station; Brown University; Ed Buchler; Colombia; Fachbereich Biologie; Brock Fenton; Germany; Jamaica; Tony Lavender; Beatrice Lawrence; Millbrook, NY; J.

Molinari; National Science Foundation; New Guinea;  
Panama; Princeton University; sound recording equipment;  
Nobua Suga; Susi Torre-Bueno; Trinidad; U. S. Department  
of Health and Human Services; University of California,  
Berkeley; University of Oregon; Washington University;  
Woods Hole;

---

Singer, Marcus

box 12

folder 122

**Scope and Contents**

House Un-American Activities Affairs Committee;  
communism; Cornell University; Harvard University;  
Howard Adelman; George Adams; Paul O'Leary;

---

Sokolov, Vladimir

box 12

folder 123

**Scope and Contents**

Harvard College; International Student Service; Alden  
H. Miller; Moscow University; Rockefeller University; J.  
Schwartzkopff; University of California-Berkeley; USSR  
Academy of Sciences; see also Konstantinov

---

Steen, Johan B.

box 12

folder 124

**Scope and Contents**

pigeon homing; University of Tromso; Norway; Rockefeller  
Foundation; University of Oslo; Harold T.'Ted' Hammel;  
Pete F. Scholander; Harvard University; Office of Naval  
Research;

---

Suthers, Roderick A.

box 12

folder 125

**Scope and Contents**

Alpha Helix; bats; Beebe Tropical Station; birds; Julia  
Chase; Chillagoe; equipment; Indiana University School of  
Medicine; Konstantinov; Andrew Meyerreicks; National  
Institutes of Health; National Science Foundation; New  
York Zoological Society; Alvin Novick; David Pye;  
Queensland; Scripps Institution of Oceanography; Simla;  
Trinidad; U.S. Public Health Service; Richard Wylie;

---

Ta-Ty

box 13

folder 126

**Scope and Contents**

Taber, Wendell - Frances Burnett; Minnesota Mining; .  
Tamkin, Arthur S. - Veterans' Administration Hospital;  
bird conditioning experiments; Skinner; Yeagley; pigeon  
orientation. Tatum, Edward L. - Rockefeller University;  
Philosophical Society. Tavalga, W. N. - Mote Marine  
Laboratory; fish acoustic orientation. Taylor, Bonnie -  
Phoenix Zoo; Edinburgh Zoo; Scotland; dog and horse  
communication; blind children; Rockefeller University.  
Taylor, C. Richard - Harvard University Museum of

Comparative Zoology; Jose Torre-Bueno. Taylor, Robert - citations. Teakle, Harold P. - E. J. Maxwell Lumber; bat sight. Telesonic Systems - bats and sound waves; Carlsbad Caverns; National Park Service. Terres, John K. - National Audubon Society; bats and tall buildings, radio/TV wave effects. Test, Frederick H. - University of Michigan; Venezuelan bats. Teuber, Hans-Lukas - Massachusetts Institute of Technology; bird navigation. Thaeler, Charles - Earlham College; Cornell University. Theodorides, J. - Museum National (No Suggestions) Naturelle; Paris; bats; Harvard University; cave photos. Thomas, Don - University of Washington; old forests and bats; kite-balloon; kytoon; . Thomas, Steven P. - bat supplies; bird tracking; Duke University; Duquesne University; Robert Mackie; National Science Foundation; Alvin Novick; James Simmons; Jose Torre-Bueno; Trinidad; wind tunnel. Thomas, Stiles - Rich Penney; Society for the Preservation of Birds of Prey; hawk migration; Ron Larkin. Thomas, Thurlo B. - Phillips Exeter Academy; William Harvey. Thompson, E. Fontelle - University of South Carolina. Thompson, M. N. - United Kingdom Meteorological Office; bird orientation. Thompson, W. F. - University of Washington Fisheries Research Institute; salmon homing; . Thompson, William R. - Cone Island, Maine; gulls. Thomson, Sir Landsborough - London; reprint. Thorpe, William H. - University of Cambridge; Harvard University; Pennycuick; Hatch; radio transmitters for birds; Poland; Ibis; Trinidad; Cornell University. Thurston, E. G. - Batelle Memorial Institute; transducer equipment. Timm, C. - Universitat Mainz; Germany; bat and moth echolocation; World War II. Tinbergen, Nikolaas - Ruksuniversiteit te Leiden; bird homing; . Tomasi, Thomas - University of Rhode Island; shrew echolocation; sound equipment. Topal, G. - Hungarian Natural History Museum; bat migration; Calvin Stillman; Harvard Ornithological Club. Torre-Bueno, Jose - Duke University; Woods Hole; bird flow patterns. Torrey, Henry - Rutgers University; bird navigation; physics. Tosteson, Thomas - University of Puerto Rico. Tracerlab - J. Kohl; radioactive isotopes in bird migration. Tracy, C. Richard - University of Wisconsin; Hammel; heat loss from mammals. Treat, Asher - bat ultrasonic cries; bat visual acuity; moths; City College, New York; Sir Cyril A. Clarke. Trembley, F. T. - Lehigh University; owls. Trempe, Duke - birds; Michigan. Tuck, Leslie - Canadian Wildlife service; bird navigation. Tucker, Richard - University of Queensland; Australia; veterinary science; bat orientation. Tucker, Vance A. - Duke University; bird gliding versus flapping; radar; Torre-Bueno; Millbrook, NY; NASA; wind tunnels; American Philosophical Society;. Tufts, Robie W. - bird migration; Bay of Fundy; Canada. Turner, Dennis C. - Johns Hopkins University; bat ecology. Turner, Ruth - Clapp Laboratories. Tuttle, Merlin D. - Milwaukee Public Museum; bat migration. Twente, John W., Jr. - University of Michigan; bat orientation. Twersky, Victor - New York University; guidance device for blind; audible click equipment. Twitty, Victor C. - Stanford University;

homing of newts. Tyack, Peter - dolphins; France; Woods Hole.

---

|                 |        |            |
|-----------------|--------|------------|
| Trapido, Harold | box 13 | folder 127 |
|-----------------|--------|------------|

### Scope and Contents

see also Projects-Panama; see also Projects-Bat Banding; Cornell University; bat banding; bat longevity; Canal Zone Corrosion Laboratory; Empire Devices; Gorgas Memorial Institute of Tropical and Preventive Medicine; Ed Gould; India; mines; Panama; U.S. Naval Station; Bill Wimsatt; Rockefeller Foundation

---

|                          |        |            |
|--------------------------|--------|------------|
| Trotter, Eleonora D'Arms | box 13 | folder 128 |
|--------------------------|--------|------------|

### Scope and Contents

Rockefeller University; balloon capture of bird sounds; bird mobbing behavior; University of New Mexico; University of Washington; Queensland; Bohemia Lumber Co.; New York Zoological Society; Garrett Eddy; Roy Talmage

---

|     |        |            |
|-----|--------|------------|
| U-V | box 13 | folder 129 |
|-----|--------|------------|

### Scope and Contents

Udvardy, Miklos D. F. - University of British Columbia; radioactive tagging; recording equipment. Ulmer, Frederic A., Jr. - Zoological Society of Philadelphia; echolocation. Utter, Katharyn - University of Washington; gibbons . Van Cleve, R. - University of Washington; salmon; U.S. Army Corps of Engineers; Alaska; Lissmann; Vladimir Walters; Breder; Raney; Easton. Van der Kloot, William - Lalor Foundation; Cornell University. Van Gelder, Richard G. - University of Illinois; Museum of Natural History, Kansas; bat collection; Alvin Novick; Sben Dijkgraaf; see also Publishers. Van Riper, Walker - Colorado Museum of Natural History; birds. Van Tilla, Marvin - bird navigation. van Tyne, Josselyn - University of Michigan; birds. Varma, D. P. - Dalhousie University; Canada; bats; . Vencl, Frederic V. - birds. Venn, Mary Adrian - bees. Verduin, Mrs. E. - bats in France. Villa-Ramirez, Bernardo - Mexican Wildlife Service; Yucatan visit; radar; kite balloons; sound recording. Vinalhaven Port District - ferries; Maine. Vleugel, D. A. - Holland; The Hague; birds. Voelker, John D. - bat radar and spinning fishing rods. Vogel, Howard H., Jr. - Vanderbilt University; radio tracking birds; University of Tennessee; Point Barrow, Alaska; Charles Walcott; Bermuda. von Gierke, Henning E. - Wright-Patterson Air Force Base, Ohio; Aero Medical Laboratory; furred animals. von Holst, Erich - Max Planck Institut. von Saint Paul, Ursula - Duke University; Rawson; Mayr. Voute, Aldo M. - Rijksuniversiteit; Holland; Holgate instruments.

---

|              |        |            |
|--------------|--------|------------|
| Unidentified | box 13 | folder 130 |
|--------------|--------|------------|

## Scope and Contents

Alden; Floyd; Fred; Garth; Harriett; Ian; Jane; Johann; Louise; Mattiot; Rosamund; Ruth; Stacey (Hustace); Warren; Barnard College; Centre National de la Recherche Scientifique; Phillips Academy; Kenyon College; Harvard University; Milton Academy; UCLA; University of California-San Diego; University of London; Yale University

---

U.S. Agencies

box 13

folder 131

## Scope and Contents

Aberdeen Proving Ground; Agricultural Research Service; Air Force Office of Scientific Research; Alaska; Army Chemical Center; Army Ordnance Department; Bureau of Biological Survey; Carlsbad Caverns; Department of Health, Education, and Welfare; Federal Security Agency; Fish and Wildlife Service; Harvard University Fatigue Lab; Irwin Goldstein; MIT; Midway Atoll; Military Air Transport Service; National Institute of Health; National Oceanic and Atmospheric Administration; National Park Service; Navy Bureau of Aeronautics; Public Health Service; South Pacific Fisheries Investigations; Southwest Rabies consultation; Billings; Denny Constantine; David B. Dill; H. F. Fraser; H. Frings; I. A. Getting; Freeman F. Hall; Arthur Hasler; Blanche Johnson; Thomas H. Johnson; Donald Kennedy; Herman Kleerekoper; William Krummes; John Marr; W. L. McAtee; James Moulton; Sidney Newman; Streicher; Joseph F. Winkler; aircraft damage by birds; bird orientation; mammalogy;

---

United States Office of Naval Research

box 13

folder 132

## Scope and Contents

American Museum of Natural History; bird and bee homing; Canal Zone; Cornell University; Mt. Hope Mine; Naval Medical Center; Panama; Rockefeller University; Shahmoon Industries; Zoologisches Institut; Lester Aronson; H. M. Auerbach; S. Galler; Arthur Hasler; H. T. Meryman; Novick; Don Schneirla; C. W. Shilling; Trapido; Richard Tousey; Von Frisch;

---

Von Frisch, Karl

box 13

folder 133

## Scope and Contents

American Philosophical Society; Cornell University; Nobel Prize; Rockefeller Foundation; U. S. Department of Agriculture; Yale University Press; Zoologisches Institut der Universitat, Germany; bees; Niels Bohr; Viktor Hamburger; Hasler; August Krogh; library resupply; Anne Roe; U.S.

lecture tour; Roberta Yerkes; see also U.S. Office of Naval Research;

---

Wa-Wh

box 14

folder 134

## Scope and Contents

Wacker, Peter - Elizabeth Marsh; Julia Chase; Rutgers University; Society of Women Geographers. Wagner, Charles N. - bat sound transmission. Walker, Gene B. - University of Oklahoma; atmospheric acoustics; NOAA; NASA. Walker, Paul A. - Randolph-Macon Woman's College. Walker, Theodore J. - McMaster University; Altec Corp.; fish noises; Scripps Institution for Oceanography; University of California; John Hilliard; Kleerekoper; William Cheville; Woods Hole. Wallace, John D. - Thomas Jefferson University Hospital; microphones. Wallingford, Daniel Kirkwood - industrial design; Cornell University; maps. Wallraff, Hans G. - Max Planck Institut; conditioned heart rate method. Walsh, Raymond R. - American Physiological Society; University of Colorado; Brookhaven National Laboratory; Cornell University; Northwestern University; sensory physiology. Walter, H. William - luminous bands. Walter, Waldemar M. - bird homing; radio transmitting stations; U. S. Army. Warner, Walter R. - Canton Center Congregational Church; bats in church. Waser, Peter - Purdue University; primate vocalization. Washburn, Sherwood L. - University of Chicago. Waterman, Talbot H. - Yale University; Cornell University. Watkins, Elwyn Mrs. - bats in house. Weatherly, W. Paul - Rockefeller University; Sri Lanka; U.S. Agency for International Development; flying fox; Millbrook, NY; Academy of Natural Science, Philadelphia. Webb, George - Woods Hole. Webb, Glenn R. - University of Kansas; radio waves. Weisz, Paul B. - Brown University; bat and fan. Welch, William A. - hawk migration; motor glider; Smirnoff Vodka; Connecticut Audubon Council. Welker, W. I. - University of Wisconsin; bat auditory system. Weller, Thomas H. - Boston Children's Hospital; bat research; rabies. Welsh, John H. - University of Cambridge; Harvard University; bat research; see also Harvard Biological Laboratory. Welter, Wilfred A. - Morehead State Teachers College; bat banding. Wendt, G. R. - University of Rochester; motion sickness. Wenzel, Bernice M. - UCLA; Papi; pigeon homing. Westby, G. W. Max - Centre National de la Recherche Scientifique, France; electric fish behavior. Westenberg, J. - Netherlands Zoologisch Station, Holland; fish acoustics. Wever, E. G. - Princeton University; sound instruments; auditory sensitivity of insects. Wheeler, Bernice - Yale University; bat film. Whitacre, David - University of California, Davis; bat falcon.

---

Wi-Wy

box 14

folder 135



## Scope and Contents

Wiesel, Torsten N. - Harvard Medical School; Society for Neuroscience; Federal funding; National Institutes of Health; Martha Constantine-Paton. Wiley, Haven - University of North Carolina; sound transmission; Axel Michelson; . Williams, C. B. - Rothamsted Experimental Station, England; bird navigation. Williams, Carroll M. - Harvard University; insect endocrinology. Williams, Clarence J. - bat book; Air Force counter-measure. Williams, Timothy and Janet - see also Projects-Beebe Tropical Station and Woods Hole; State University of New York, Buffalo. Wilson, David Sloan - Michigan State University; evolutionary theory. Wilson, Don E. - University of New Mexico; bat homing; U.S. Fish and Wildlife Service; National Museum of Natural History; Costa Rica. Wilson, Thomas - birds and Allentown airport tower. Wilsson, Lars - beaver behavior; Sweden. Wing, Leonard - State College of Washington. Wingate, David B. - Bermuda Department of Agriculture and Fisheries; NASA radar project; bird migration; Jeremy Hatch. Winn, Howard E. - University of Maryland; echolocation. Wittenberg University - Powelson, Elizabeth E.. Wodzicki, Count K. A. - Consulate General, Poland; bird homing; R. J. Wojtusiak; New Zealand Department of Scientific and Industrial Research. Wojtusiak, R. J. - University of Cracow; bird navigation; K. A. Wodzicki. Wolf, Ernst - Wellesley College; von Frisch. Wolfson, Albert - Northwestern University; ornithology book. Wood, Meridth, Jr. - kites; Millbrook, NY. Wood, Sherwin F. - Los Angeles City College; bat diseases. Woodbury, Angus M. - University of Utah; pelican nesting sites; migration theory. Woodbury, David T. - Psycho-acoustic laboratory; Merck and Co.. Woodcock, Alfred - University of Hawaii; NASA radar; Woods Hole; Alpha Helix; bird navigation; Duncan Blanchard; Atmospheric Sciences Research Center; Office of Naval Research; State University of New York, Albany; Alfred Redfield. Wood-Gush, David G. M. - Poultry research Center; Scotland. Woolf, Nigel - Cornell University; bird echolocation; Alpha Helix ; tape recordings. World Wide Broadcasting Foundation - brochure. Worth, C. Brooke - Rockefeller Foundation; bird migration and stars; Cape May, NJ property. Wright, Albert Hazen and Anna - Penikese Island. Wright, Nellie M. - bats in various states. WVHC Radio Station - Hofstra University; animal to man communication program. Wylie, Richard M. - Walter Reed Army Medical Center; sub-auditory sound. Wyman, Louise - bats in house.

---

Walcott, Charles

box 14

folder 136

## Scope and Contents

Cornell University; pigeon homing; animal thinking;  
Martin Michener; State University of New York, Stony

Brook; National Geographic Society; bat films; New York  
Zoological Society

---

Wimsatt, William

box 14

folder 137

### Scope and Contents

Cornell University; Harold Trapido; Carl Engler; P.E.  
Crowe; tropical bats; Brookhaven National Laboratory;  
Mexico; Life Magazine; Beebe Tropical Station, Trinidad;  
John H. Hughes; U.S. Public Health Service; see also  
Publishers-Academic Press, Inc.

---

X-Z

box 14

folder 138

### Scope and Contents

Yacobi, V. E. - USSR Academy of Science; Torre-Bueno;  
bird navigation and radar. Yarmouth Town, Massachusetts  
- bounties for seals. Yarwood, T. M. - England; ultrasonic  
bat sounds. Yeagley, Henry L. - homing pigeon orientation;  
Pennsylvania State College; National Science Foundation;  
Army Signal Corps; Office of Naval Research. Yerkes  
Regional Primate Research Center - Duane M. Rumbaugh;  
language formation studies. Yerkes, Robert M. - Yale  
University; von Frisch; . Yonge, C. M. - University of  
Glasgow; Herbert Hillman; University of California. Zander,  
H. A. - Tufts College Dental School; bat experiments with  
tissue drug reaction. Zhukov, Dr. - Konstantinov; USSR;  
Leningrad University; . Zuloaga, Guillermo - Venezuela;  
acoustic orientation of guacharos; photographs.

---

Yodlowski, Marilyn

box 14

folder 139

### Scope and Contents

Harvard Medical School; pigeon sound sensitivity; Woods  
Hole; Johns Hopkins University; Fernando Nottebohm;  
T. J. Sejnowski; Rockefeller University; Carl Pfaffmann;  
Kreithen; Cornell University; Grass Polygraph

[^ Return to Table of Contents](#)

## Projects

### Arrangement

Alphabetical by name of project.

### Scope and Contents

Series 2 contains correspondence regarding projects not part of routine work at Cornell, Harvard, or Rockefeller University that have a sufficient quantity of pertinent documents to warrant separation.

#### Adams Bat Bomb -

In 1942, while a research associate at Harvard, Griffin conducted preliminary research to determine the viability of using bats to carry small bombs. Although he concluded that the project was not feasible, the idea's promoter, Lytle Adams, continued to pursue his proposal and the concept gained considerable public attention.

#### Arctic Aeromedical Laboratory -

During the winters of 1950-51, 1951-52, and 1952-53, Griffin and his assistants studied effects of wind on insulation of fur in animals, gastro-intestinal tract heat production, and other aspects relevant to man's ability to survive in cold temperatures. Research was conducted under Air Force contract AF 33(038)-12764, at Ladd Air Force Base, Fairbanks, Alaska.

#### Arctic Research Laboratory/Arctic Institute of North America -

In the summer of 1947 and 1948, Griffin conducted homing experiments studying bird orientation and sensory physiology. Work was funded by the U.S. Office of Naval Research and based at Point Barrow, Alaska.

#### Alpha Helix Expedition -

In the summer of 1969, Griffin began a four-month trip to New Guinea on the vessel Alpha Helix (owned by Scripps Institution of Oceanography) where he studied bats and cave swiftlets. The expedition was operated by the University of California with funding from the National Science Foundation. Griffin was in the crew headed by George Bartholomew that included fellow scientists Jocelyn Crane (Griffin's wife), Jared Diamond of UCLA, Alan Grinnell of UCLA, Susumu Hagiwara, Bodil Schmidt-Nielsen, and Hobart van Deusen.

#### Austin Ornithological Research Station -

Over the course of several years beginning in 1933 and extending into the mid-1950s, Griffin banded birds, primarily terns and herring gulls, on Penikese Island, Massachusetts observing obstacle avoidance and homing instincts. The studies were done in conjunction with Griffin's university affiliations and Woods Hole Marine Biological Laboratory.

#### Bat Banding -

Griffin began banding bats while a high school student and continued for at least two decades, finding colonies in mines and caves throughout the Northeast and in Kentucky, Ohio, Pennsylvania, and Canada. Data about banded bats was still being returned as late as 1956 and informed new understanding of bat longevity, hibernation, and migration. Some of the banding activities were conducted in connection with Woods Hole Oceanographic Institution and correspondence about that work is included in the Bat Banding project folder.

#### Beebe Tropical Research Station -

Between July 1960 and August 1969, Griffin made several trips to the Beebe Tropical Research Station in Simla, Trinidad studying bat visual detection and echolocation and fish-catching bat abilities. The Station was operated jointly with the New York Zoological Society and some of the research was funded by the National Science Foundation. Griffin's wife, Jocelyn Crane, conducted research into fiddler crab behavior there. Griffin and Crane shared responsibility for the facility's scientific work.

#### Bowdoin Scientific Station -

Beginning in the 1930s and continuing into the 1950s, Griffin and colleagues took trips to the Bowdoin Scientific Station's Kent Island facility in the Bay of Fundy, New Brunswick, Canada where they studied bird homing and navigation, especially in petrels and gannets.

**Chillagoe Expedition -**

In summer 1980, Griffin was one of several international scientists in the Chillagoe Expedition, a U. S. National Science Foundation sponsored trip to Queensland, Australia for the study of sensory physiology and perception in bats, bowerbirds, and cave swiftlets.

**Huyck Preserve -**

In 1939, Griffin received a summer fellowship at the Edmund Niles Huyck Preserve in Rensselaerville, New York, and later published journal articles based on his bat banding and research there.

**Panama -**

In the spring of 1953, Griffin and a Harvard student, Prentice Bloedel ("Pen") spent two months researching and filming tropical fish-catching bats in Panama. Bloedel continued for a few more months. Griffin's former student, Harold Trapido with the Gorgas Memorial Laboratory in Panama was a key contact for the project. Griffin periodically imported bats from there and some of his students visited to research. The U.S. Office of Naval Research sponsored some of Griffin's work in the Canal Zone.

**Woods Hole Oceanographic Institution -**

Beginning as early as 1945 and extending into the 1970s, Griffin conducted independent research, usually during summers, at Woods Hole investigating a variety of topics including bat navigation, bird orientation, and radar tracking. The U.S. Office of Naval Research supported Griffin's research on bat radar in the summer of 1953 and a few years earlier when he investigated fish hearing. Correspondence about bat banding and monitoring activities based from Woods Hole is included in the Bat Banding project folder. Although not connected to a specific project, correspondence related to Griffin's service as an Associate in Physiology of the WHOI is included in this folder.

| <b>Title/Description</b>  | <b>Instances</b> |            |
|---|------------------|------------|
| Adams Bat Bomb  | box 14           | folder 140 |
| <b>Scope and Contents</b><br><br>Lytle S. Adams; J. C. Von Bloeker; James B. Conant;<br>Harvard University Psycho-Acoustical Laboratory; Los<br>Angeles City College; True Magazine; Jim Chester;<br>National Defense Research Committee  |                  |            |
| Alpha Helix, New Guinea   | box 14           | folder 141 |
| <b>Scope and Contents</b><br><br>American Museum of Natural History; George<br>Bartholomew; bat and bird orientation; Theodore Bullock;<br>Jared Diamond; Alan Grinnell; Susumu Hagiwara; Tom<br>Harrisson; Ernst Mayr; H. Elliott McClure; National<br>Science Foundation; New Guinea; New York Zoological<br>Society; Northeastern Bird Banding Association; Bodil<br>Schmidt-Nielsen; Per Scholander; Scripps Institution of<br>Oceanography; Otto Soemarwoto; Charles Sibley; Rod<br>Suthers; University of California, San Diego; Universitat<br>Munchen; Gregorio T. Velasquez; Hobart van Deusen; Peter<br>and Helen Waser; Zweifel; |                  |            |
| Arctic Aeromedical Laboratory   | box 14           | folder 142 |

## Scope and Contents

Cornell University; Fairbanks, Alaska; insulation  
physiology; Ladd Air Force Base; Leeds and Northrup Co.;  
Office of Naval Research; Alan Burton; Harold Theodore  
Hammel; J. H. Heim; Major Andres Karstens; Harry  
Johnson; Kenneth Rawson; Kaare Rodahl; Peter Morrison,  
University of Wisconsin; University of Western Ontario  
Faculty of Medicine; Wood;

---

Arctic Research Laboratory

box 14

folder 143

## Scope and Contents

Point Barrow, Alaska; bird orientation; Office of Naval  
Research; Per Scholander; Woods Hole Oceanography  
Institute; Kenneth Rawson; Col. Walter Wood; Harold  
Theodore Hammel; Cornell University; Raymond J. Hock;  
Martin Karplus; British Joint Services Mission;

---

Austin Ornithological Research Station

box 15

folder 144

## Scope and Contents

Oliver L. Austin, Sr.; Maurice Brown; Fred Packard; Cape  
Cod, MA; Penikese Island; Maine; New Brunswick; bird  
banding; Massachusetts Division of Fisheries and Game;  
U.S. Biological Survey; Seth Low; U.S. Fish and Wildlife  
Service

---

Bat Banding

box 15

folder 145

## Scope and Contents

Audubon Nature Center; Bird-Lore; Boy Scouts of America;  
Carnegie Institute; Chester Emory Mines; Dartmouth  
College; Dick Dow; John S. Hall; Harold B. Hitchcock;  
Richard Kolseth; Robert S. Luce; Mashpee Indian;  
Massachusetts Department of Conservation; Middlebury  
College; Mohonk Mountain House; National Band and  
Tag Co.; National Museum of Natural History; New York  
State College for Teachers; New York State Museum;  
Philadelphia Zoological Gardens; Phillips Academy Nature  
Club; pigeons; Royal Ontario Museum of Zoology; Werner  
Ruppell; Salt Lake Stamp Co.; Harold Trapido; U. S.  
Department of Interior; University of Massachusetts;  
University of New Hampshire; University of Western  
Ontario; Richard L. Weaver; Woods Hole; Worcester  
Natural History Society; Zoologisches Museum, Berlin;

---

Beebe Tropical Research Station

box 15

folder 146

## Scope and Contents

Simla, Trinidad; bats; butterflies; crabs; Michael Beecher;  
Jack Bradbury; Marc Buchanan; Kay Campbell; Julia  
Chase; Jocelyn Crane; Dorothy Dunning; Paul Ehrlich;

Michael Emsley; Sir Lindsay Grant; John Hall; Jeremy Hatch; Nina Leen; Inger; H. Markl; Rich Penney; William Stiles; Nobuo Suga; Rod Suthers; Timothy and Janet Williams; William Wimsatt; National Science Foundation; New York Zoological Society; Rockefeller University; Time-Life;

---

Bowdoin Scientific Station

box 15

folder 147

**Scope and Contents**

bird homing; Kent Island; Bay of Fundy, New Brunswick, Canada; J. W. Blunt; Edgar Folk; Dr. Gross; Rex Harris; Charles Huntington; Ernest Joy; Henry Kittredge; New Brunswick Museum

---

Chillagoe Expedition

box 15

folder 148

**Scope and Contents**

bats; bowerbirds; Peter Dwyer; Leslie Hall; Jim Simmons; Dermot Smyth; Rod A. Suthers; David Thompson; Cliff and Dawn Frith Prionodura; Indiana University; National Science Foundation

---

Huyck Preserve

box 15

folder 149

**Scope and Contents**

Cornell University; Harvard University; New York Division of Fish and Game; Bradbury, Bump, Dalglish; Lincoln Pond; G. E. Folk; William Hamilton, Jr.; Thomas Ordway, M.D.; see also Projects-Bat Banding

---

Panama

box 15

folder 150

**Scope and Contents**

bat acoustics; Prentice Bloedel (?Pen?); John H. Hughes; Al Novick; Harold Trapido; William Wimsatt; Canal Zone Corrosion Laboratory; Empire Devices; Gorgas Memorial Laboratory; Office of Naval Research; U.S. Public Health Service;

---

Woods Hole Oceanographic Institution

box 15

folder 151

**Scope and Contents**

bats; birds; dolphins; whales; Bronx Zoo; Millbrook; New York Blood Center; Office of Naval Research; Randolph Air Force Base; Richard Backus; Andrew Bunker; Helen Clark; Cameron Gifford; Judith Grassle; Brackett Hersey; A. J. Kalmijn; John Kanwisher; Ron Larkin; Elizabeth Redfield

Marsh; John M. Teal; Jose and Susi Torre-Bueno; Peter  
Tyack; Timothy and Janet Williams; Jeffries Wyman

[^ Return to Table of Contents](#)

## Lab Books, 1944-1981

### Arrangement

Lab books are arranged in numerical order when numbers were shown; otherwise, books are in chronological order with the oldest date first. Oversize files are physically arranged together in a dedicated box.

### Scope and Contents

Lab Books are handwritten records of scientific observations and experiments and often include machine printouts and photographs showing results of particular tests. In addition to lab books kept as part of routine work at Cornell, Harvard, and Rockefeller Universities, some are for separate projects including the Alpha Helix Expedition and Beebe Tropical Research Station. Some books are titled with brief descriptions of their contents: jamming experiments, underwater sound, bats hitting targets, wind tunnel experiments, human echolocation, ground echolocation, and grid echoes.

Books kept by laboratory assistants are included and their names are shown when indicated on the book covers. Abbreviated descriptions of contents are shown in the box/folder listing as written on the front of lab books. Some lab books include typewritten summaries of experiments that appear to be drafts for publication. A few have pages inserted with later dates that appear to be reviews of earlier work. Photographs and machine printouts remain with the original lab books in order to preserve valuable context.

A handwritten note in file shows "Loaned to Nigel V. Woolf Cornell Notebooks 20, 21, 23" and those notebooks are not included in this collection. Numbers 19, 25, and 41-50 are also missing. It is possible that some of the unnumbered ones were intended to have the missing numbers.

| Title/Description  | Instances |            |
|--|-----------|------------|
| 11944 December 7-1946 March 23   | box 16    | folder 152 |
| 2: 1946 March 28-December 26 (added material re bat pulse 1949-50s), 1946 March-December 1949-1950 | box 16    | folder 153 |
| 31946 November-1948 December   | box 16    | folder 154 |
| 41948 December 7-1949 July   | box 16    | folder 155 |
| 51949 July 16-1950 May 3   | box 16    | folder 156 |
| 61950 May 20-December 5  | box 17    | folder 157 |
| 7: 1950 June 1-August 29 "Underwater sound, etc.", 1950 June 1-August 29                           | box 17    | folder 158 |
| 8: "Bats", 1951 March-July 13  | box 17    | folder 159 |
| 9: "Bats", 1951 July 20-1952 March 4   | box 17    | folder 160 |
| 10: "Bats", 1952 March 4-May 15  | box 18    | folder 161 |
| 11: "Bats", 1952 June 17-August 12   | box 18    | folder 162 |

|   |        |            |
|---|--------|------------|
| 12, 1952 October 22-1943 March 27   | box 18 | folder 163 |
| 13: 1953 May 5-June 19 "Bat Flight plus Bat sound records and bird homing obs. Summer '53", 1953                              | box 18 | folder 164 |
| 14, 1953 June 19-August 30  | box 19 | folder 165 |
| 15, 1953 November-1954 June 29  | box 19 | folder 166 |
| 16: "Bats", 1954 June 30-August 16  | box 19 | folder 167 |
| 17, 1954 August 23-1955 January 10  | box 20 | folder 168 |
| 18: "Bats", 1955 June 5-August 14   | box 20 | folder 169 |
| 22: "Bats - Plecotus and Myotis flight and Jamming Expts", 1957 June 28-November 13   | box 20 | folder 170 |
| 24: "Bats - Myotis and Eptesicus jamming, Plecotus search for higher frequencies", 1958 June 28-1959 January 7                | box 20 | folder 171 |
| 26 "J. J. G. McCue and R.E. Richardson", 1959 January 23-December 15  | box 20 | folder 172 |
| 27: "Bats- Insect catching Webster Lab - Charles R. Michael", 1959 May 28-December 17   | box 21 | folder 173 |
| 28: "Clarke R. Slater, Animal Orientation-Bats, Myotis jamming and End wall", 1959 June 23-August 29                          | box 21 | folder 174 |
| 29: "Charles Reid Michael - High and Low Frequency Jamming", 1959 July 16-August 24   | box 21 | folder 175 |
| 30: "Bats, Jamming", 1959 August 28-1960 February 27  | box 21 | folder 176 |
| 30A: "Bat Flight Data- raw data", 1960 February 1-April 27  | box 21 | folder 177 |
| 31: "Jamming", 1960 March 9-April 27  | box 21 | folder 178 |
| 31A: "Plecotus - movies for distance of detection" with later notes, 1960 April 19-May 20                                     | box 21 | folder 179 |
| 32: "Plecotus in noise, tabulations, Nancy Griffin's work", 1960 April 26-28  | box 22 | folder 180 |
| 33, 1960 April 27-July 9  | box 22 | folder 181 |
| 34: "Noctilio, Simla", 1960 July  | box 22 | folder 182 |
| 35: "Zoological Laboratory, U. of Cambr.", 1960 October-1961 May 15   | box 22 | folder 183 |
| 36: "Trinidad", 1961 July 10-August 31  | box 22 | folder 184 |
| 37: 1961 September 21-1962 March 31; "Noctilio 1961 and 1962 Cambridge including XII and inf lar.Sectioning" Simla, 1961-1962 | box 22 | folder 185 |
| 38 - 1961 June 23-July 31 "Bat tape Catalogue, Dunning; Trinidad Summer 1960; 1961 January 22 England", 1960-1961             | box 23 | folder 186 |



|   |        |            |
|---|--------|------------|
| 39 - 1961 July 31 and 1961 January England "Bat tape Catalogue, Dunning", 1961 JanuaryJuly 31 1961                                | box 23 | folder 187 |
| "Judith Friend: Disks, Sonar Discrimination Myotis lucifugus", 1962 June 1-August 16  | box 23 | folder 188 |
| "Judith Friend: Disks, Sonar Discrimination Myotis", 1962 August 17-1963 January  | box 23 | folder 189 |
| "Judith Friend - Preliminary Cylinder expts.", 1964 Spring  | box 23 | folder 190 |
| "Judith Friend: Disk Experiments I, Bat flights tossed and hanging targets", 1964 Spring  | box 23 | folder 191 |
| "Judith Friend: Disk experiments II", 1964 Spring   | box 23 | folder 192 |
| 1964 September and 1966 July-August - "Judith Friend: Last Best Harvard Echo discrimination data", 1964 September1966 July-August | box 23 | folder 193 |
| "M. Flinn: Directional Measurements Book II", 1965 March 13   | box 24 | folder 194 |
| "Wind tunnel expts.", 1967 May 17-December 13   | box 24 | folder 195 |
| 52: "Prints of Bat pulses and information concerning them, Record of spectrograms", 1968 April 10-19                              | box 24 | folder 196 |
| AH 1: Alpha Helix, 1969 June-July   | box 24 | folder 197 |
| AH 2: 10 June-21 Dec. 1970 July 1969 Alpha Helix - "New Guinea Bats", 1969 July1970 June 10-December 21                           | box 24 | folder 198 |
| 1974 July 12-November 9   | box 25 | folder 199 |
| GE 1: "Grd. Echos", 1974 November 9-11  | box 25 | folder 200 |
| GE 2: "Grd. Echos", 1974 November 9-11  | box 25 | folder 201 |
| H.E. 1, 1975 November 18-1981 January 31  | box 25 | folder 202 |
| "Human Echolocation Test Sheets", 1980 January-March  | box 25 | folder 203 |
| 1975 May - "Pulse and Echoes" and 1980 Spring - "Human Echolocation duplicate prints and negatives", 1975 May1980 Spring          | box 25 | folder 204 |
| 40: 1961 June 23 - "Bat Movie Film Catalogue, - Dunning" "Trinidad - Summer 1960; England 1960-1961", 1960-1961                   | box 26 | folder 205 |
| Simla, Trinidad, 1966 June 13-Aug 1966  | box 26 | folder 206 |
| 51, 1967 October 10-1968 March 29   | box 26 | folder 207 |
| Ground Echoes, 1974 November 2-16   | box 26 | folder 208 |

[^ Return to Table of Contents](#)

## Publications, 1930-1989

## Scope and Contents

Series 4 includes newspaper and magazine clippings as well as scientific reprints and other publications by Griffin and fellow scientists. The Newspaper and Magazine articles folder has an article about Theodore Hammel who worked on the atom bomb in Los Alamos, MN and subsequently changed his graduate studies from physics to physiology as a result of hearing a lecture by Griffin. Newspaper and magazine articles address various aspects of Griffin's work for a general public audience—bat "radar," animal communication, bat diseases, "bat bomb." Some have interviews with Griffin, his students, or fellow scientists. A few are clippings of bats in advertisements or comic strips and some articles are in German and Spanish language publications.

A list of Griffin's publications through 1988 is at the front of the first folder of "Articles, Reprints, Reviews-by Griffin."

This collection does not contain a complete set of all of his publications.

## Arrangement

Newspaper and Magazine Clippings are arranged in chronological order with newest date first. Items with no date are at the end of the folder. Publications by Griffin as author or co-author are in chronological order with newest date first. Publications by others are in alphabetical order by surname of first author.

| Title/Description               | Instances |            |
|---------------------------------|-----------|------------|
| Newspaper and Magazine Articles | box 26    | folder 209 |
| Griffin, Animal Thinking        | box 27    | folder 210 |

## Scope and Contents

Animal Thinking, Cambridge, MA: Harvard University Press, 1984.

|   |        |            |
|---|--------|------------|
| Griffin, The Question of Animal Awareness (First and Second edition.) | box 27 | folder 211 |
|---|--------|------------|

## Scope and Contents

The Question of Animal Awareness: Evolutionary Continuity of Mental Experience, New York: Rockefeller University Press, 1976.

|   |        |            |
|---|--------|------------|
| Griffin and Novick, Animal Structure and Function; Scientific American-Animal Engineering | box 27 | folder 212 |
|---|--------|------------|

## Scope and Contents

Introduction and "More About Bat 'Radar'" in Readings from Scientific American: Animal Engineering, San Francisco: W. H. Freeman and Co., 1974. Animal Structure and Function, New York: Holt, Rinehart, and Winston Inc., 1970.

|   |        |            |
|---|--------|------------|
| Articles, Reprints, Reviews by Griffin, 1980s | box 27 | folder 213 |
|---|--------|------------|

## Scope and Contents

"Cognitive Aspects of Echolocation" in Animal Sonar, Processes and Performance, New York: Plenum, 1988.

Review of Tactical Deception in Primates, Behavioral and Brain Sciences, 11:233-273, 1988. "Foreword to papers on Magnetic Sensitivity in Birds" in Animal Learning and Behavior, , 1987. Review of The Comparative Psychology of Intelligence, Behavioral and Brain Sciences, 10:645-695, 1987. Foreword in Dolphin Cognition and Behavior: A Comparative Approach, Hillsdale, NJ: L. Erlbaum Assoc., 1986. "Epilogue: The Cognitive Dimensions of Animal Communication" in Experimental Behavioral Ecology and Sociobiology, New York: Springer, 1985. "Recollections of an Experimental Naturalist" in Leaders in the Study of Animal Behavior, Lewisburg, PA: Bucknell University Press, 1985. Animal Consciousness, Neuroscience and Biobehavioral Reviews, 9: 615-622, 1985. Animal Thinking, excerpts , American Scientist, 72:456-464, 1984. Introduction to Animal Mind - Human Mind, Dahlem Workshop Report, Berlin: Springer-Verlag, 1982. Ecology of Migration: Is Magnetic Orientation a Reality?, Quarterly Review of Biology, Vol. 57, No. 3, 1982. High altitude echolocation of Insects by Bats , Behavioral Ecology and Sociobiology, 10:303-306, 1982. Echolocation by Cave Swiftlets, Behavioral Ecology and Sociobiology, 10:119-123, 1982. The Question of Animal Awareness: Evolutionary Continuity of Mental Experience, Los Altos, CA: William Kaufman, Inc., 1981. The Early History of Research on Echolocation in Animal Sonar Systems, New York: Plenum, 1980.

---

Articles, Reprints, Reviews by Griffin, 1970s

box 27

folder 214

## Scope and Contents

Radar Observations of Bird Migration over the Western North Atlantic Ocean, Behavioral Ecology and Sociobiology, 4:225-264, 1979. Echolocation of Extended Surfaces in Animal Migration, Navigation, and Homing, New York: Academic Press, 1978. The Sensory Physiology of Animal Orientation in Harvey Lectures (Series 71), New York: Academic Press, 1978. Expanding Horizons in Animal Communications Behavior in How Animals Communicate, Bloomington, IN: Indiana University Press, 1977. Echolocation and its Relevance to Communication Behavior in How Animals Communicate, Bloomington, IN: Indiana University Press, 1977. The Audibility of Frog Choruses to Migrating Birds, Animal Behaviour, 24:421-427, 1976. Reactions of Migrating Birds to Lights and Aircraft, Proceedings of the National Academy of Sciences, 1976. Sounds Audible to Migrating Birds, Animal Behaviour, 22:672-678, 1974. Echolocation of Insects by Horseshoe Bats, Nature, Vol. 250, No. 5469, pp. 731-732, 1974. Echolocation in Basic Mechanisms in Hearing, New York: Academic Press, 1973. Oriented Bird Migration In or Between Opaque Cloud Layers, Proceedings, American Philosophical Society, Vol. 117, No. 2, pp. 117-141, 1973. Nocturnal Bird Migration in Opaque Clouds in Animal Orientation and Navigation, Washington, D.C.: U. S. Government Printing Office,

1972. The Importance of Atmospheric Attenuation for the Echolocation of Bats (Chiroptera), *Animal Behaviour*, 19:55-61, 1971. Sensitivity of Echolocation in Cave Swiftlets, *The Biological Bulletin*, 139:495-501, 1970. Migrations and Homing of Bats, in *Biology of Bats*, Vol. 1, New York: Academic Press, 1970.

---

Articles, Reprints, Reviews by Griffin, 1960s

box 28

folder 215

### Scope and Contents

The Physiology and Geophysics of Bird Navigation, *Quarterly Review of Biology*, 44:255-276, 1969. Echo-Orientierung und Fledermausflug, *Naturwissenschaft und Medizin*, Vol. 27, No. 3, 1969. Echolocation and its Relevance to Communication Behavior in Animal Communication, Bloomington, IN: Indiana University Press, 1968. The Homing Ability of the Neotropical Bat *Phyllostomus Hastatus*, with Evidence for Visual Orientation, *Animal Behaviour*, Vol. 14, No. 4, pp. 468-473, 1966. Discriminative Echolocation by Bats, *Animal Sonar Systems*, 1966. Bird Migration and Celestial Navigation, *Rockefeller University Review*, Vol. 3, No. 4, 1965. Target Discrimination by the Echolocation of Bats, *Journal of Experimental Zoology*, Vol. 158, No. 2, pp. 155-168, 1965. Target Discrimination by the Echolocation of Bats, unknown, 1965. Probable 24-year Longevity records for *Myotis Lucifugus*, *Journal of Mammalogy*, Vol. 46, No. 2, 1965. Die fischenden Fladermause von Trinidad, *Das Tier*, 1964. The Fishing Bats of Trinidad, *Animal Kingdom*, Vol. 66, No. 5, 1963. Animal Navigation, *Proceedings, International Congress of Zoology*, Vol. 4, 1963. The Potential for Telemetry in Studies of Animal Orientation at Bio-Telemetry Conference, Oxford: Pergamon Press, 1963. Comparative Studies of the Orientation Sounds of Bats, *Symposium, Zoological Society of London*, No. 7, pp. 61-72, 1962. The Role of the Flight Membranes in Insect Capture by Bats, *Animal Behaviour*, 10:3-4, 1962. Neural Discriminations Achieved by Bats in Echolocation, *Science*, 1962. Ultrasonic Frequencies in Bird Song, *Ibis*, 104:220-227, 1961. Laryngeal Mechanisms in Bats for the Production of Orientation Sounds, *Journal of Experimental Zoology*, Vol. 148, No. 2, pp. 125-146, 1961. Notes on Homing and Migratory Behavior of Bats, *Ecology*, Vol. 41, No. 2, 1960. The Echolocation of Flying Insects by Bats, *Animal Behaviour*, 8:141-154, 1960.

---

Articles, Reprints, Reviews by Griffin, 1950s

box 28

folder 216

### Scope and Contents

The Sensitivity of Echolocation in the Fruit Bat, *Rousettus*, *Biological Bulletin*, Vol. 115, No. 1, pp. 107-113, 1958. More About Bat "Radar", *Scientific American*, Vol. 199, No. 1, 1958. The Sensitivity of Echolocation in Bats, *Biological Bulletin*, Vol. 114, No. 1, pp. 10-22, 1958. The Ultrasonic 'Radar' of the Bat, *The Reflector*, Vol. 6,

No. 5, 1958. Ability of Bats to Discriminate Echoes from Louder Noise, *Science*, Vol. 128, No. 3316, pp. 145-147, 1958. Longevity Records and Notes on Tooth Wear of Bats, *Journal of Mammalogy*, Vol. 38, No. 3, 1957. Further Observations of Homing Terns, *Biological Bulletin*, Vol. 111, No. 2, pp. 235-239, 1956. Acoustic Orientation of Neotropical Bats, *Journal of Experimental Zoology*, Vol. 130, No. 2, pp. 251-300, 1955. Initial Flight Directions of Homing Birds, *Biological Bulletin*, Vol. 108, No. 3, pp. 264-276, 1955. An Echo-Sounding Bird, *Discovery*, Vol. 16, No. 3, 1955. Hearing and Acoustic Orientation in Marine Animals in *Marine Biology and Oceanography*, London: Pergamon Press, Ltd., pp. 406-417, 1955. Review of Avian Physiology, *Science Monthly*, 1954. Bird Sonar, *Scientific American*, Vol. 190, No. 3, 1954. Deluge Underground, *The American Caver*, Vol. 15, 1953. Acoustic Orientation in the Oil Bird *Steatornis*, *Proceedings of the National Academy of Sciences*, Vol. 39, No. 8, pp. 884-893, 1953. Sensory Physiology and the Orientation of Animals, *American Scientist*, Vol. 41, No. 2, 1953. Bat Sounds Under Natural Conditions, with Evidence for Echolocation of Insect Prey, *Journal of Experimental Zoology*, Vol. 123, No. 3, pp. 435-466, 1953. Airplane Observations of Homing Birds, *Bulletin of the Museum of Comparative Zoology*, Vol. 107, No. 8, 1952. Bird Navigation, *Feathers*, Vol. 14, No. 9, 1952. Bird Navigation, *Biological Reviews*, Vol. 27, 1952. Radioactive Tagging of Animals Under Natural Conditions, *Ecology*, vol. 33, No. 3, 1952. Acoustic Location of Insect Prey by Bats, *The Anatomical Record*, Vol. 111, No. 3, 1951. Alaskan Bird Migrations, *Research Reviews*, 1951. Audible and Ultrasonic Sounds of Bats, *Experientia*, Vol. 7, 1951. Measurements of the Ultrasonic Cries of Bats, *The Journal of the Acoustical Society of America*, Vol. 22, No. 2, pp. 247-255, 1950. The Navigation of Bats, *Scientific American*, Vol. 183, No. 2, 1950.

---

Articles, Reprints, Reviews by Griffin, 1940s

box 28

folder 217

## Scope and Contents

Die Navigation der Vogel, *Naturwissenschaftliche Rundschau*, 1949. Airplane Observations of Homing Birds, *Ecology*, Vol. 30, No. 2, 1949. The Navigation of Birds, *Scientific American*, 1948. Experiments on Bird Navigation, *Science*, Vol. 107, No. 2779, pp. 347-349, 1948. The Sensitivity of the Human Eye to Infra-Red Radiation, *Journal of the Optical Society of America*, Vol. 37, No. 7, pp. 546-554, 1947. The Change in Refractive Power of the Human Eye in Dim and Bright Light, *Journal of the Optical Society of America*, Vol. 37, No. 5, pp. 321-336, 1947. Supersonic Cries of Bats, *Nature*, Vol. 158, pp. 46-48, 1946. The Effects of Cold and rate of Ascent on Aero-Embolism, *Aviation Medicine*, 1946. Travels of Banded Cave Bats, *Journal of Mammalogy*, vol. 26, No. 1, pp. 15-23, 1945. Echolocation by Blind Men, Bats and Radar, *Science*, Vol. 100, No. 2609, pp. 589-590, 1944. How Bats Guide Their Flight by Supersonic Echoes, *American Journal of*

Physics, Vol. 12, No. 6, pp. 342-345, 1944. The Sensory Basis of Bird Navigation, The Quarterly Review of Biology, Vol. 19, No. 1, pp. 15-31, 1944. Homing Experiments with Herring Gulls and Common Terns, Bird Banding, Vol. 14, No. 1 and 2, 1943. Obstacle avoidance by Flying Bats: The cries of Bats, Journal of Experimental Zoology, Vol. 89, No. 3, 1942. Flying Ornithologists, Bulletin of Massachusetts Audubon Society, Vol. 26, No. 3, pp. 55-60, 1942. The Sensory basis of Obstacle Avoidance by Flying Bats, Journal of Experimental Zoology, Vol. 86, No. 3, 1941. Notes on the Life Histories of New England Cave Bats, Journal of Mammalogy, Vol. 21, No. 2, pp. 181-187, 1940. Homing Experiments with Leach's Petrels, The Auk, Vol. 57, pp. 61-74, 1940. Migrations of New England Bats, Bulletin of the Museum of Comparative Zoology, Vol. 86, No. 6, 1940.

---

Articles, Reprints, Reviews by Griffin, 1930s

box 28

folder 218

### Scope and Contents

Bats Migrate Too, New England Naturalist, No. 5, 1939. Wings Without Feathers, New England Naturalist, No. 4, 1939. Mother Cary's Chickens, Bulletin of Massachusetts Audubon Society, Vol. 23, No. 3, 1939. Experimental Determinations of Supersonic Notes Emitted by Bats, Journal of Mammalogy, Vol. 19, No. 4, pp. 454-455, 1938. Activity Rhythms in Bats Under Constant External Conditions, Journal of Mammalogy, Vol. 18, No. 3, pp. 337-338, 1937. Bat Banding, Journal of Mammalogy, Vol. 17, No. 3, pp. 235-239, 1936. Stomach Contents of Atlantic Harbor Seals, Journal of Mammalogy, Vol. 17, No. 1, pp. 65-66, 1936. Marking Bats, Journal of Mammalogy, Vol. 15, No. 3, pp. 202-207, 1934. Migratory Behavior in Encyclopedia of Science and Technology, New York: McGraw Hill, undated Bat in, Encyclopedia, unknown, undated

---

Articles, Reprints, Reviews by Others - A-G

box 29

folder 219

### Scope and Contents

Barbour, Thomas, Bats, The Atlantic, 1945. Bentley, David R., Genetic Control of an Insect Neuronal Network, Science, Vol. 174, pp. 1139-1141, 1971. Boyden, Louise, Bats on the Beam: Nature's 'Built-in' Equipment controls Blind Flying by Supersonic Broadcasting, Scientific American, Vol. 165, No. 2, pp. 78-79, 1941. Bradley, James V., Effect of Gloves on Control Operation Time, Washington, D.C.: U.S. Air Force, 1956. Brines, Michael L. and James L. Gould, Bees have Rules, Science, Vol. 206, pp.571-573, 1979. Burton, Maurice, Checkered Distribution of Bats, Illustrated London News, 1962. Carson, Rachel, The Bat Knew It First, Collier's Weekly, 1944. Constantine, Denny G., Jens A. Jenson and Ernest S. Tierkel, The Use of Radiolabeling in Determining Prey-Predator Relationships, Journal of Mammalogy, Vol. 40, No. 2, pp. 240-242, 1959.

Dresner, Simon, Sound Beyond Hearing, Science Teacher's World, 1961. Emsley, Michael G., David A. Nickle, and W. Wayne Moss, The Value of the Stridulatory File and Other Characters in Tettioniid Taxonomy (Orthoptera), Notulae Naturae, No. 404, 1967. Fisher, Arthur, Animals that "SEE" with Their Ears, Science Teacher's World, 1961. Flowers, Betty, Bird Migration, Highlights, 1968. Galambos, Robert, Flight in the Dark: A Study of Bats, Scientific Monthly, Vol. 56, No. 2, 1943. Gallant, Roy A., How Bats "see" by Sound, Science World, Vol. 4, No. 5, 1958. Gomez, Ramon Mudarra, La Cueva del Guacharo, El Agricultor Venezolano, Vol. 13, No. 138, 1950. Grew, E.S., The Radar of the Bat, Illustrated London News, 1946.

---

Articles, Reprints, Reviews by Others - H-Z

box 29

folder 220

### Scope and Contents

Hapgood, Fred, The Ghostly Wings of Night , GEO: The Earth Diary, Vol. 3, 1981. Harris, David M. and Peter Dallos, Forward Masking of Auditory Nerve Fiber Responses, Journal of Neurophysiology, Vol. 42, No. 4, 1979. Harvey, Andre, The Bat-Navigator First Class, Science World: Scholastic Teacher, Vol. 13, No. 3, 1966. Kettering, C. F., Catching Up With Nature, General Motors Symphony of the Air, 1944. Markl, Hubert, Stridulation in Leaf-Cutting Ants, Science, Vol. 149, No. 3690, 1965. Michener, Martin C. and Charles Walcott, Navigation of Single Homing Pigeons: Airplane Observations by Radio Tracking, Science, Vol. 154, No. 3748, pp. 410-413, 1966. Olson, Hank, W6GXN, and John Van Geen, The FVGT Box, QST, 1972. Pennington, Jim, Bats and Radar, Princeton Engineer, 1955. Poling, James, The Baffling BAT, National Wildlife, undated. Pringle, Laurence, Hunting with Echoes, Nature and Science, Vol. 4, No. 3, 1966. Redfield, Alfred C., Tide and Time on Cape Cod, The Cape Cod Naturalist, Vol. 1, No. 2, pp. 22-26, 1972. Safford, Edward L., Jr., Modern Radar: Theory, Operation and Maintenance, Blue Ridge Summit, PA: Tab Books, Inc., undated. Schnitzler, Hans-Ulrich, Echoortung bei der Fledermaus Chilonycteris rubiginosa, Z. vergl. Physiologie, Vol. 68, pp. 25-38, 1970. Solomon, Joan, Bats, The Sciences, Vol. 10, No. 3, 1970. Steen, J. and P. S. Enger, Muscular Heat Production in Pigeons During Exposure to Cold, The American Journal of Physiology, Vol. 191, No. 1, 1957. Steen, Jon, Climatic Adaptation in Some Small Northern Birds, Ecology, Vol. 39, No. 4, 1958. Suthers, Roderick A., Wie orten fischfangende Flederm.,use ihre Beute?, UMSCHAU, 1967. Teale, Edwin, How Bats "See" in the Dark, Popular Science, 1941. White, E. B., Song of the Queen Bee, n. p., undated. Zuloaga, Guillermo, Los gu charos se gujan por Radar en la oscuridad, El Farol, No. 147, 1953.

---

Publications - By Others (Waring)

box 29

folder 221

## **Scope and Contents**

Waring, Charles E., ed., Summary Technical Report of Division 17 NDRC, Vol. 3, Transition and Reception of Sounds Under Combat Conditions, Washington, D.C.: Office of Naval Research, 1946.

[^ Return to Table of Contents](#)