



Smithsonian Institution Archives

## Helmut Karl Buechner Papers, 1939-1975

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## Table of Contents

Collection Overview .....	1
Administrative Information .....	1
Historical Note.....	1
Descriptive Entry.....	1
Names and Subjects .....	2
Container Listing .....	4
Series 1: SCHOOL NOTES, EXAMS, LECTURES, AND TERM PAPERS, 1939-1947. ARRANGED CHRONOLOGICALLY.....	4
Series 2: CORRESPONDENCE, 1946-1975. ARRANGED CHRONOLOGICALLY.... 6	
Series 3: GENERAL OFFICE FILES, 1950-1975. ARRANGED ALPHABETICALLY.....	10
Series 4: RESEARCH PROJECTS, 1946-1975.....	16
Series 5: THESES BY FORMER STUDENTS, COLLECTED BY HELMUT K. BUECHNER. ARRANGED CHRONOLOGICALLY, 1951-1960.....	32
Series 6: ABSTRACTS, ARTICLES, AND BOOK REVIEWS, 1942-1974.....	33
Series 7: LECTURES, SEMINARS, AND SYMPOSIA. ARRANGED CHRONOLOGICALLY, 1949-1974.....	39
Series 8: AUDIO RECORDINGS, 1959-1972.....	41
Series 9: PHOTOGRAPHS. ARRANGED BY SUBJECT.....	44
Series 10: NOTEPADS AND DIARY, 1965, 1970-1971.....	48
Series 11: OBSERVATION AND MACHINE READABLE DATA ON THE KOB.....	49
Series 12: DIPLOMAS AND CERTIFICATES, 1938-1966.....	50
Series 13: CHARTS, DIAGRAMS, BLUEPRINTS, AND MAPPINGS.....	51

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## Collection Overview

<b>Repository:</b>	Smithsonian Institution Archives, Washington, D.C., <a href="mailto:osiaref@si.edu">osiaref@si.edu</a>
<b>Title:</b>	Helmut Karl Buechner Papers
<b>Identifier:</b>	Record Unit 7279
<b>Date:</b>	1939-1975
<b>Extent:</b>	32.72 cu. ft. (31 record storage boxes) (4 12x17 boxes) (1 oversize folder)
<b>Creator::</b>	Buechner, Helmut K. (Helmut Karl)
<b>Language:</b>	English

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## Administrative Information

### Preferred Citation

Smithsonian Institution Archives, Record Unit 7279, Helmut Karl Buechner Papers

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## Historical Note

Helmut Karl Buechner (1918-1975) was born in Scotia, New York. He received his B.S. degree from New York State College of Forestry, Syracuse University in 1941, and his M.S. degree from Texas A&M College, College Station in 1943. After completing military service, Buechner continued his education at Texas A&M College. For his Ph.D. thesis, Buechner did research on the range ecology of the pronghorn antelope in the Trans-Pecos region in southwest Texas, 1946-1947. Buechner taught herpetology at Texas A&M College during the Fall of 1947. In 1948, Buechner transferred to Oklahoma A&M College, Stillwater, where he received his Ph.D. degree in 1949. From 1948-1965, Buechner taught zoology and botany at Washington State College (now University), Pullman. In 1965, Buechner joined the Smithsonian Institution as the first director of the Office of Ecology. Buechner was Senior Ecologist for the Office of Environmental Sciences, 1969-1972, and from 1972 to 1975, he was Senior Ecologist for the National Zoological Park (NZIP).

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## Descriptive Entry

For the most part, these papers document Buechner's primary research interest, the ecology of terrestrial vertebrates, with emphasis on relationships to vegetation and social behavior. Included are Buechner's research on the pronghorn antelope, which contains field notes, journals, photographs, and reports to the Texas Cooperative Wildlife Unit, which sponsored Buechner's research; a study of elk and deer in relation to livestock and range in the Blue Mountains region of southeastern Washington, 1949-1960; and research on the bighorn sheep, 1954-1960, which contains correspondence with personnel at the bighorn sheep animal refuges, photographs, field notes, journal, and a manuscript of Buechner's book, *The Bighorn Sheep in the United States, Its Past, Present, and Future*, 1959.

From 1956 to 1958, Buechner, as a Fulbright Scholar, conducted research in Uganda, on the elephant census and migration, the relationship of elephants to vegetation at Murchison Falls National Park, and reproduction of the Uganda kob. These papers include reports on aerial counts of elephants, photographs, field data and notes.

During Buechner's stay in Uganda, he became interested in the unique territorial and mating behavior of the Uganda kob. Buechner made trips to Uganda's Toro Game Reserve to study the Uganda kob in 1959, 1962-1963, and 1972. Materials documenting these trips include maps, field observation data, transcriptions, audio recordings, photographs, machine readable data and analytical computations of kob movements by Buechner and H. Daniel Roth, 1965-1972.

In addition, these papers contain photographs documenting Buechner's study of the ibex in Switzerland, taken when Buechner was consultant to the Swiss Foundation for Alpine Research during the summer of 1961; a report when Buechner was consultant to the United Nations Food and Agriculture Organization to study the elephants in relation to the Tana River Irrigation Project in Kenya in 1965; and reports when Buechner was consultant to Troy Meadows, in 1966, and to the Great Swamp National Wildlife Refuge, in 1970, (both are located in New Jersey) to study the environmental impact of animals in relation to land within the parks.

Additional material documents Buechner's feasibility studies on tracking free-roaming animals, such as elk, with the Interrogation Recording Location System (IRLS) satellite, 1969-1971, and includes incoming correspondence critical of the project, manuscripts, progress reports, and photographs; and a study of Indian rhinoceros mating behavior at the NZP, 1972, which led to the first successful live birth of this species in the Western Hemisphere, 1974, and includes photographs, tape recordings, and transcripts of observations made by volunteers and National Zoo staff.

Other materials contained in these papers include general correspondence, mostly with university faculty, conservationists, park wardens, and naturalists, pertaining to Buechner's research; reading files, 1968-1972; Buechner's school notes and term papers when he was a student, 1939-1947; lecture material when Buechner taught herpetology at Texas A&M College, 1947; research proposal evaluations Buechner did for the National Science Foundation and the National Geographic Society; handbook written in conjunction with Lee H. Talbot for the International Union for Conservation of Nature and Natural Resources; survey on usefulness of night vision devices; Buechner's proposed research projects at Washington State College (University); materials pertaining to various zoological and conservation organizations; theses by Buechner's former students; articles, abstracts, and book reviews written or co-authored by Buechner; information on projects in Ceylon, Israel, and Korea when Buechner was the head of the Office of Ecology; diplomas and certificates; audio recordings on elk immobilization, 1972, Earth Week Symposium, 1969, and a Panel on the Environment and Development, undated; group photographs of professional scientific organization meetings; Buechner's family photographs; photographs of NZP; and oversize material consisting of blueprints of the new deer area at NZP, 1972, and charts and graphs.

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## Names and Subject Terms

This collection is indexed in the online catalog of the Smithsonian Institution under the following terms:

Subjects:

Ecology  
Mammalogy

Types of Materials:

Black-and-white negatives  
Black-and-white photographs

Clippings  
Color photographs  
Color transparencies  
Field notes  
Manuscripts  
Maps  
Sound recordings

Names:

Buechner, Helmut K. (Helmut Karl)  
National Zoological Park (U.S.)  
New York State College of Forestry  
Oklahoma A & M College  
Smithsonian Institution. Office of Ecology  
Syracuse University  
Texas A & M University  
Washington State University

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## Container Listing

### Series 1: SCHOOL NOTES, EXAMS, LECTURES, AND TERM PAPERS, 1939-1947. ARRANGED CHRONOLOGICALLY.

#### Box 1

Box 1 of 35	Entomology, 1939
Box 1 of 35	Forest administration, 1940
Box 1 of 35	Forest pathology, 1940
Box 1 of 35	Invertebrate and vertebrate zoology laboratory notes, 1940
Box 1 of 35	Lake and stream survey, 1940
Box 1 of 35	Plant taxonomy, 1940
Box 1 of 35	"Report on New England Trip," 1940
Box 1 of 35	"Report on Southern Trip," 1940
Box 1 of 35	Survey, plankton, vegetation and fish life, 1940
Box 1 of 35	Botany courses, 1940-1941
Box 1 of 35	Agrostology: "Grasses of the United States," 1941
Box 1 of 35	Histology and Embryology, 1941
Box 1 of 35	"Life Histories," 1941
Box 1 of 35	"Parasitology course," 1941
Box 1 of 35	"Vegetational Study of North and South Facing Slopes near Syracuse, New York," 1941
Box 1 of 35	Zoology, 1946
Box 1 of 35	Fishes, c. 1947
Box 1 of 35	Herpetology: Field Course, 1947
Box 1 of 35	Herpetology: Lab notes, 1947
Box 1 of 35	Herpetology: Lectures and exams, 1947
Box 1 of 35	"Curriculum in range and wildlife management" (undated)

*[Return to Table of Contents](#)*

## Series 2: CORRESPONDENCE, 1946-1975. ARRANGED CHRONOLOGICALLY.

### Box 1

- Box 1 of 35 A - Z, 1946 (2 folders)
- Box 1 of 35 Antelope, 1947
- Box 1 of 35 A - Z, January-October, 1947 (4 folders)
- Box 1 of 35 A - Z, 1948 (2 folders)
- Box 1 of 35 A - Z, 1949

### Box 2

- Box 2 of 35 A - G, 1949-1952 (7 folders)
- Box 2 of 35 H - Z, 1949-1952 (17 folders)
- Box 2 of 35 A - Z, 1952-1954 (9 folders)
- Box 2 of 35 A - G, 1955-1956 (7 folders)

### Box 3

- Box 3 of 35 H-Z, 1955-1956 (14 folders)
- Box 3 of 35 A, 1956-1958
- Box 3 of 35 Ba - Bul, 1956-1958
- Box 3 of 35 Buechner, Helmut K., correspondence filed at Washington State College during African stay, 1956-1958
- Box 3 of 35 Butler, Ava, 1956-1958
- Box 3 of 35 Buss, Irven O., 1956-1958
- Box 3 of 35 C - F, 1956-1958 (4 folders)
- Box 3 of 35 Fulbright correspondence, 1956-1957
- Box 3 of 35 G - J, 1956-1958 (4 folders)
- Box 3 of 35 Ka - King, 1956-1958
- Box 3 of 35 Kinloch, Bruce G., 1956-1958
- Box 3 of 35 Kn - Ko, 1956-1958



Box 3 of 35 L - U, 1956-1958 (9 folders)

Box 3 of 35 Uganda Protectorate - General and unidentified correspondence, 1956-1958

Box 3 of 35 Unidentified, 1956-1958

Box 3 of 35 V, 1957

Box 3 of 35 W, 1956-1958

Box 3 of 35 Washington State College (Pullman), 1956-1958

Box 3 of 35 Y, 1957-1958

Box 3 of 35 A, 1958-1962

Box 3 of 35 African Conference, proposed, 1959

Box 3 of 35 B, 1958-1962 (2 folders)

Box 3 of 35 Buss, Irven O., 1958-1959

Box 3 of 35 C, 1958-1962 (2 folders)

Box 3 of 35 Calvin Company - Motion Picture Services, 1958-1962

Box 3 of 35 D - E, 1958-1962 (2 folders)

Box 4

Box 4 of 35 F - K, 1958-1962 (6 folders)

Box 4 of 35 Kinloch, Bruce G., 1958-1962

Box 4 of 35 Krumholz, Louis A., 1958-1962

Box 4 of 35 L - P, 1958-1962 (7 folders)

Box 4 of 35 Pronghorn Antelopes - International Union for the Conservation of Nature  
and Natural Resources, 1959

Box 4 of 35 Q - U, 1958-1962 (6 folders)

Box 4 of 35 Uganda films, correspondence pertaining to, 1959

Box 4 of 35 Uganda, general correspondence, 1959

Box 4 of 35 V, 1958-1962

Box 5

Box 5 of 35	W, 1958-1962
Box 5 of 35	Wright, Philip L., 1958-1960
Box 5 of 35	Y - Z, 1958-1962 (2 folders)
Box 5 of 35	A - C, 1962-1965 (3 folders)
Box 5 of 35	Cowen, William, 1963-1965
Box 5 of 35	D - E, 1962-1965 (2 folders)
Box 5 of 35	F - H, 1962-1965 (3 folders)
Box 5 of 35	I, 1964-1965
Box 5 of 35	J - L, 1962-1965 (3 folders)
Box 5 of 35	Leuthold, Walter, 1962-1965
Box 5 of 35	M, 1962-1965
Box 5 of 35	Memoranda, 1962-1965
Box 5 of 35	N, 1962-1965
Box 5 of 35	O - P, 1962-1965
Box 5 of 35	Q, 1964
Box 5 of 35	R - S, 1962-1965
Box 5 of 35	Smith, Dorothy S., 1962-1963
Box 5 of 35	T - U, 1962-1965 (2 folders)
Box 5 of 35	Uganda trip - dictated correspondence (transcribed from dictabelts), 1962-1963
Box 6	
Box 6 of 35	Unidentified correspondence, 1962-1965
Box 6 of 35	V - Z, 1962-1965 (3 folders)
Box 6 of 35	A - H, 1965-1972 (8 folders)
	Note: Interrogation, Recording and Location System Satellite, 1966-1971 (see Box 21)
Box 6 of 35	I, 1965-1968

Box 6 of 35	J - K, 1965-1972 (2 folders)
Box 6 of 35	Kob, general correspondence, 1965-1969 (2 folders)
Box 6 of 35	L - P, 1965-1972 (6 folders)
	Note: Satellite tracking of elk, criticism of project, 1970-1971 (see Box 20)
Box 6 of 35	Q, 1969
Box 6 of 35	R - T, 1965-1972 (3 folders)
Box 6 of 35	U, 1966
Box 6 of 35	V, 1966, 1971
Box 6 of 35	W, 1965-1972
Box 6 of 35	Y, 1967-1970
Box 6 of 35	Z, 1965-1972
Box 6 of 35	A, 1972-1974
Box 6 of 35	B, 1972-1975
Box 6 of 35	C, 1971-1974
	Box 7
Box 7 of 35	D, 1973-1974
Box 7 of 35	E - X, 1972-1974 (19 folders)
Box 7 of 35	Y, 1973-1974
Box 7 of 35	Z, 1972-1974
Box 7 of 35	A - M, 1974-1975
Box 7 of 35	N - P, 1975
Box 7 of 35	Riney, Thane, 1975
Box 7 of 35	Ro - Y, 1975

*[Return to Table of Contents](#)*

## Series 3: GENERAL OFFICE FILES, 1950-1975. ARRANGED ALPHABETICALLY.

### Box 7

- Box 7 of 35 Ad Hoc Task Force for Legislative Review, 1969-1970
- Box 7 of 35 Advisory Board for Forestry, Range, Wildlife and Water Resources, 1958-1960
- Box 7 of 35 African - American Institute, 1961
- Box 7 of 35 African Wildlife Leadership Foundation, 1961
- Box 7 of 35 American Association for the Advancement of Sciences, program book for meeting, Chicago, December 26-31, 1970
- Box 7 of 35 American Institute of Biological Science (AIBS): "Environmental Education: The Adult Public," 1970
- Box 7 of 35 AIBS: meetings, 1969 and 1970 (2 folders)
- Box 7 of 35 American Society of Mammalogists: "Report of the Committee on Conservation of Land Mammals," 1956
- Box 7 of 35 American Society of Zoologists (ASZ): Budget information, 1969-1970
- Box 7 of 35 ASZ: Division of Ecology, background material and correspondence, 1967-1969
- Box 7 of 35 ASZ: Division of Ecology, members, 1969-1972

### Box 8

- Box 8 of 35 ASZ: Meetings, 1968-1969 (2 folders)
- Box 8 of 35 ASZ: Newsletters, 1967-1972
- Box 8 of 35 ASZ: Papers presented, 1970-1972
- Box 8 of 35 ASZ: Planning letters, 1970
- Box 8 of 35 Audubon Naturalist Society, 1967-1970
- Box 8 of 35 Biotelemetry - Porpoises, 1970
- Box 8 of 35 Book reviews: correspondence, 1966-1969
- Box 8 of 35 Ceylonese Elephants - behavior and ecology, 1969-1971 (2 folders)

- Box 8 of 35 Chesapeake Bay Center for Field Biology: proposal for a biotelemetry facility, 1969
- Box 8 of 35 Committee on Environmental Quality, 1967-1970 (2 folders)
- Box 8 of 35 Conference on Land Use Problems in Areas Containing Game, Lake Tanyara, Tanganyika, February 20-23, 1961 (papers presented by Lee M. Talbot)
- Box 8 of 35 Ecology conference, Millbrook School, May 1971
- Box 8 of 35 Employment Application Information (Helmut K. Buechner's), 1948-1955
- Box 8 of 35 Fifth World Forestry Congress, 1960
- Box 8 of 35 Food and Agricultural Organization (FAO) of the United Nations, 1964-1965
- Box 8 of 35 Ford Foundation, 1959
- Box 8 of 35 Fulbright Fellowship, 1956-1960
- Box 8 of 35 Fulbright reports, 1956-1958
- Box 8 of 35 Fulbright Scholar reports, 1958-1960 (2 folders)
- Box 8 of 35 Great Swamp National Wildlife Refuge, New Jersey, 1970
- Box 8 of 35 Guggenheim Memorial Foundation, 1962
- Box 8 of 35 International Association for Ecology, 1969-1971
- Box 9
- Box 9 of 35 International Union for Conservation of Nature and Natural Resources (ICUN), 1970-1972
- Box 9 of 35 ICUN handbook: "Capturing and Handling Wild Animals with Drugs," by Lee M. Talbot and Helmut K. Buechner, undated
- Box 9 of 35 ICUN handbook: "Time - Observation Method of Determining Food Habits of Ungulates," by Helmut K. Buechner, 1962
- Box 9 of 35 International Union of Biological Sciences (IUBS), 17th General Assembly, 1970 (2 folders)
- Box 9 of 35 International Union of Forestry Research Organizations, 1969
- Box 9 of 35 Israel: Bird banding and avifaunal survey, 1970-1972
- Box 9 of 35 Israel: Gazelles, 1972 (report)
- Box 9 of 35 Kob: San Diego Zoo, 1974

- Box 9 of 35 Kob: West Africa, 1973
- Box 9 of 35 Korea: "A Cooperative Program for Ecosystem Research in Korea," 1966-1968 (final report)
- Box 9 of 35 Logbook: use of privately owned motor vehicles by government officials (Buechner's), 1956-1958
- Box 9 of 35 Morrison, John A.: PhD dissertation program, 1962-1965
- Box 9 of 35 Movies: Calvin Production, Inc., 1963-1964
- Box 9 of 35 Movies: Commentary on Kob research film, 1967
- Box 9 of 35 Movies: Kob film sale, 1972-1973
- Box 9 of 35 Movies: "Territorial Behavior in Uganda Kob," 1959-1961, 1971
- Box 9 of 35 Movies: "Wild Animals in Uganda National Parks," 1960-1961
- Box 9 of 35 National Geographic Society (NGS), 1972
- Box 9 of 35 NGS: Proposals, 1971; 1974-1975 (2 folders)
- Box 9 of 35 NGS: Proposal evaluations, 1970-1971
- Box 9 of 35 National Institute of Ecology, 1969-1971
- Box 9 of 35 National Institute of Health computer system, 1973
- Box 9 of 35 National Science Foundation (NSF), 1961-1964
- Box 9 of 35 NSF: Proposal evaluation guidelines
- Box 9 of 35 NSF: Proposal evaluations, 1967, 1969 (2 folders)
- Box 9 of 35 NSF: Proposal evaluations, 1970 (2 folders)
- Box 10
- Box 10 of 35 NSF: Proposal evaluations, 1970-1971 (4 folders)
- Box 10 of 35 NSF: Proposal evaluations, 1972-1974 (3 folders)
- Box 10 of 35 NSF: Travel grants, 1961, 1964
- Note: National Zoological Park (NZN): Blueprints of deer area, 1965 (see Oversize)
- Box 10 of 35 NZN: Front Royal meetings, 1974

Box 10 of 35                   NZP: miscellaneous

Box 10 of 35                   Natural Land and Water Reserves System, 1966 (report)

Box 10 of 35                   Newspaper articles, 1956-1958

Box 10 of 35                   Night Vision Devices: 1964-1972

Box 10 of 35                   Night Vision Devices: Starlight Scopes, general correspondence, 1970-1972

Box 10 of 35                   Night Vision Devices: Reports from users of Starlight Scopes, 1971

Box 10 of 35                   North American Wildlife Conference, 1960

Box 10 of 35                   Northwest Scientific Association, 1959-1967

Box 10 of 35                   Notes (memo to secretary?), 1960

Box 10 of 35                   Notice of research projects, 1974

Box 10 of 35                   Office of Ecology annual reports, 1967-1969

Box 10 of 35                   Pacific Ridley Turtle, 1970

Box 10 of 35                   Personnel file (Helmut K. Buechner's), 1965-1970

Box 10 of 35                   Polar Bears: International Meetings on Polar Bears, 1965-1966

Box 10 of 35                   Position papers: Legislation on Ecology, 1969-1970

Box 10 of 35                   Publication case files, 1965-1970 (2 folders)

Box 10 of 35                   Publication case file: American Heritage Series, 1966-1968

Box 10 of 35                   Reading File, January-June 1972

Box 10 of 35                   Reading File, July-December 1971

Box 10 of 35                   Reading File, January-June 1971

Box 11

Box 11 of 35                   Reading File, July-December 1970

Box 11 of 35                   Reading File, January-June 1970

Box 11 of 35                   Reading File, July-December 1969

Box 11 of 35                   Reading File, May-June 1969

Box 11 of 35                   Reading File, April-May 1968

- Box 11 of 35                    Research Project Proposal: "Calorie Requirement of Ringneck Pheasants for Survival at Low Temperature," 1952
- Box 11 of 35                    Research Project Proposal: "Population Studies of Elk in Southeastern Washington State," 1961
- Box 11 of 35                    Research Project Proposal: "Reproduction in a Natural Population of Chamois in Switzerland," (undated)
- Box 11 of 35                    Research Proposal: "Utilization of Space in Small Mammal Communities," proposal by Becky Myton, 1970
- Box 11 of 35                    Royal Veterinary College: East Africa Expedition (interim report), 1962
- Box 11 of 35                    St. Vincent Island: 1969, 1971
- Box 11 of 35                    *Science* (magazine): manuscript evaluations, 1970-1971, 1974
- Box 11 of 35                    Smithsonian Foreign Currency Program: proposal evaluation, 1971-1972
- Box 11 of 35                    "Territoriality in the Natural Regulation of Numbers in a Population of Bobwhite Quail," (proposal), 1970
- Box 11 of 35                    Threatened Ungulates of North America, 1974
- Box 11 of 35                    Tropical Biology, 1966-1968
- Box 11 of 35                    Troy Meadows (New Jersey): Environmental impact study, 1966
- Box 11 of 35                    Troy Meadows, 1971
- Box 11 of 35                    Uganda National Parks reports, 1961
- Box 11 of 35                    Union for Research and Experimentation in Higher Education, 1965-1968
- Box 11 of 35                    United Nations Conference on the Human Environment, June 1972
- Box 11 of 35                    University of Chicago Press: "Territoriality in an African Antelope," resume for new book, 1969-1972
- Box 11 of 35                    Upper Volta: Po National Park report, 1975
- Box 11 of 35                    Vegetational Analyses of the Flora of North America, 1969
- Box 11 of 35                    Washington State College Research Grant Proposal: "A Determination of Range Carrying Capacity for Livestock and Big Game in the Blue Mountains of Washington," 1955
- Box 11 of 35                    Washington State College Research Grant Proposal: "Adult Mortality Rate and Pattern in a Population of Chukar Partridge," 1959



- Box 11 of 35                      Washington State University Project Proposal: "Reproduction in Uganda Kob," 1960
- Box 11 of 35                      Washington State University Research Grant: Initiative Project Reports, 1963-1964
- Box 11 of 35                      The Welcome Foundation, Ltd., 1962
- Box 11 of 35                      White-eared kob study proposal, 1974
- Box 11 of 35                      White-tailed deer study proposal, 1971
- Box 11 of 35                      Wildlife Monitoring Conference, 1973
- Box 11 of 35                      Wildlife Society: African Wildlife Committee, 1960
- Box 11 of 35                      Williamson, Francis S. L.: "Interdisciplinary Research on the Rhode River as a Watershed - Estuarine System of the Chesapeake Bay," proposal to NSF, undated
- Box 12
- Box 12 of 35                      World Wildlife Fund, 1966-1975

*[Return to Table of Contents](#)*

## Series 4: RESEARCH PROJECTS, 1946-1975.

### Box 12

#### Bighorn Sheep Project

- Box 12 of 35 Arizona correspondence, 1954-1955
- Box 12 of 35 California correspondence, 1954-1955, 1959
- Box 12 of 35 Colorado correspondence, 1954-1955
- Box 12 of 35 Idaho correspondence, 1955
- Box 12 of 35 Montana correspondence, 1954-1956, 1959
- Box 12 of 35 Nevada correspondence, 1954-1956, 1959
- Box 12 of 35 New Mexico correspondence, 1954-1956, 1959
- Box 12 of 35 South Dakota correspondence, 1955-1956, 1959
- Box 12 of 35 Texas correspondence, 1959
- Box 12 of 35 Utah correspondence, 1954-1956, 1959
- Box 12 of 35 Washington and Oregon correspondence, 1956
- Box 12 of 35 Wyoming correspondence, 1954-1955
- Box 12 of 35 Miscellaneous correspondence, 1954-1956, 1959
- Box 12 of 35 Manuscript correspondence during African Trip, 1957
- Box 12 of 35 Manuscript correspondence, 1959
- Box 12 of 35 Field Notes and Research Material - Arizona, 1955-1956
- Box 12 of 35 Field Notes and Research Material - California, 1955-1957
- Box 12 of 35 Field Notes and Research Material - Colorado, 1955
- Box 12 of 35 Field Notes and Research Material - Idaho, 1955-1956
- Box 12 of 35 Field Notes and Research Material - Montana, 1954-1955
- Box 12 of 35 Field Notes and Research Material - Nevada, 1955, 1959
- Box 12 of 35 Field Notes and Research Material - New Mexico, 1955-1956

- Box 12 of 35                    Field Notes and Research Material (Research Material only) - Washington State and Oregon
- Box 12 of 35                    Field Notes and Research Material - Wyoming, 1954-1956
- Box 12 of 35                    Absaroka Range (Shoshone National Forest): Aerial survey, 1955
- Box 12 of 35                    Baja, California, 1955
- Box 12 of 35                    Behavior of bighorn populations
- Box 12 of 35                    Bighorn Harvest, 1958-1959
- Box 12 of 35                    Bighorn Sheep in the United States - Past, Present and Future, manuscript, 1959 (2 folders)
- Box 12 of 35                    Bighorn sheep project: outline
- Box 12 of 35                    Bighorn sheep reports to the New York Zoological Society, 1954-1955
- Box 12 of 35                    Bighorn sheep data, 1954
- Box 12 of 35                    Death Valley National Monument, 1955-1956
- Box 12 of 35                    Fecal analyses, 1955-1956
- Box 12 of 35                    Glacier National Park, 1955
- Box 13
- Box 13 of 35                    Hunting data, 1956
- Box 13 of 35                    Itineraries
- Box 13 of 35                    Journal, 1955
- Box 13 of 35                    Plant lists
- Box 13 of 35                    Photographs, lists of photographs to be used in Buechner's publications; includes some correspondence. See also Boxes 28-31.
- Box 13 of 35                    Printed materials - Arizona
- Box 13 of 35                    Printed materials - California, Colorado, Idaho
- Box 13 of 35                    Printed materials - Montana, New Mexico, Oregon, Texas, Nevada
- Box 13 of 35                    Printed materials - U.S. Department of Agriculture and Reprints
- Box 13 of 35                    Printed materials - Wyoming
- Box 13 of 35                    References

- Box 13 of 35 Special report - Field observations on bighorn sheep: Sun River Country, Lewis and Clark National Forest - Augusta, Montana, December 20-29, 1954
- Box 13 of 35 Tables of vegetation
- Box 13 of 35 Transects, Summer, 1954
- Box 13 of 35 United States Forest and Wildlife Service: Bighorn counts and estimates (Desert Game Range, Kofa Game Range, Cabeza Prieta Game Range, and San Andres Game Range)
- Box 13 of 35 United States Forest Service Commission on Bighorn: abstracts of reports on Rocky Mountains sheep study, 1940-1941
- Box 13 of 35 Yellowstone National Park, 1958
- Box 13 of 35 Cougar: survey, 1956
- Box 13 of 35 Elephant Census: "Aerial count of elephant in Tsavo National Park," 1957
- Box 13 of 35 Elephant Census: "Aerial counts of elephants in Murchison National Park," 1958
- Box 13 of 35 Elephant Census: Field notes and data, 1957-1962
- Elk Census and Vegetation Study (Note: Diagrams and graphs, see Box 35)
- Box 13 of 35 Field notes, 1949-1950
- Box 13 of 35 Field Notes, Grant-in-Aid Project No. 22, 1949
- Box 14
- Box 14 of 35 Field Notes, 1950
- Box 14 of 35 Field Notes, 1952 (Mill Creek Watershed)
- Box 14 of 35 Field Notes, 1954
- Box 14 of 35 Journal, 1948: This journal includes the period in which Buechner lived in Stillwater, Oklahoma, and the move to Washington State, and pertains mostly to a study of quail restocking.
- Box 14 of 35 Journal, 1950
- Box 14 of 35 Vegetation: Journal and Field notes, 1951
- Box 14 of 35 Journal and Field Notes, 1952
- Box 14 of 35 Journal and Field Notes, 1953

Box 14 of 35 Elk: Aerial counts, 1956

Box 14 of 35 Elk: Antler measurements, 1956

Box 14 of 35 Elk: Blue Mountains elk census, 1951

Box 14 of 35 Elk: Blue Mountains elk counts, 1959-1960

Box 14 of 35 Elk: Blue Mountains elk statistics (manuscripts), 1950

Box 14 of 35 Elk: Breeding season of elk in Washington, 1954

Box 14 of 35 Elk: Data, 1950-1952

Box 14 of 35 Elk Census: Data, 1960

Box 14 of 35 Elk: Duplicate checkout, 1960

Box 14 of 35 Elk and deer mortality (charts and graphs) - Tables #2, #14

Box 14 of 35 Elk census and kill statistics in the Blue Mountains, 1947-1956

Box 14 of 35 Elk checking station data, 1953

Box 14 of 35 Elk Checking Stations, Data and Summary, 1954

Box 14 of 35 Elk Checking Stations, 1955

Box 14 of 35 Elk Checking Stations, 1959

Box 14 of 35 Elk Checking Stations, 1960

Box 14 of 35 Elk counts, 1956

Box 14 of 35 "Elk Report, January 1, 1959," by Philip J. Urness and Donald E. McKnight

Box 14 of 35 Vegetation: Elk summer range study, 1950

Box 14 of 35 Elk survey, 1949

Box 14 of 35 Elk: Green to dry air conversions, 1951-1952

Box 14 of 35 Vegetation: Literature references, 1952

Box 14 of 35 Vegetation: Mill Creek watershed study, Summer 1952

Note: Photographs: jaw bones of elks of different ages, see Box 28;  
vegetation, see Boxes 28-31

Box 14 of 35 Elk: Quarterly reports, 1960

Box 14 of 35 Elk: Reproduction data (Mill Creek hunt questionnaires), 1954

Box 14 of 35 Elk: Results, 1960

Box 14 of 35 Elk: "Special Problems - 1953 Blue Mountains Elk Statistics," by William Strock and Dan Johnson

Box 14 of 35 Elk: Successful hunters, 1950-1953

Box 14 of 35 Vegetation: Tables

Box 14 of 35 Vegetation: Unknowns

Box 14 of 35 Vegetation: Abies Grandis Forest (elevation 5200-6300 feet), 1951

Box 14 of 35 Vegetation: Abies Grandis Forest (elevation 5200-6300 feet), 1952

Box 14 of 35 Vegetation: Abies-Grandis-Salix Forest (elevation 4000-5200 feet), 1951

Box 14 of 35 Vegetation: Abies Lasiocarpa Forest (elevation 5200-6300 feet), 1951

Box 14 of 35 Vegetation: Abies Lasiocarpa Savanna (elevation 5200-6300 feet), 1951

Box 14 of 35 Vegetation: Abies Lasiocarpa Summit Flats (elevation 5200-6300 feet), 1951

Box 14 of 35 Vegetation: Agropyron-Poa Grassland (elevation 4000-5200 feet), 1951

Box 14 of 35 Vegetation: Agropyron-Poa Grassland (elevation 4000-5200 feet), 1952

Box 14 of 35 Vegetation: Alnus-Sorbus (elevation 5200-6300 feet), 1951

Box 14 of 35 Vegetation: Ceanothus Shrub (elevation 5200-6300 feet), 1951

Box 14 of 35 Vegetation: Festuca-Agropyron Grassland (elevation 6200-6300 feet), 1951

Box 14 of 35 Vegetation: Holodiscus Shrub (elevation 4000-5200 feet), 1951

Box 14 of 35 Vegetation: Open Pseudotsuga Taxifolia Forest (elevation 4000-5200 feet), 1951-1952

Box 14 of 35 Vegetation: Physocarpus Shrub (elevation 4000-5200 feet), 1951

Box 14 of 35 Vegetation: Pinus Ponderosa Savanna (elevation 4000-5200 feet), 1951

Box 14 of 35 Vegetation: Prunus Ceanothus Shrub (elevation 5200-630 feet), 1951

Box 14 of 35 Vegetation: Salix (elevation 5200-6300 feet), 1951

Box 14 of 35 Vegetation: Vaccinum Shrub (elevation 5200-6300 feet), 1951

Box 14 of 35 Elk: Wichita Mountains Wildlife Refuge - elk reproduction data, 1951-1953

Ibex

- Box 14 of 35      Field notes, 1961
- Box 14 of 35      Map: city and vicinity of Interlaken, Switzerland
- Box 14 of 35      "A Motion Picture of the Ibex in Switzerland," (Washington State 171 Project Proposal), 1961
- Note: Ibex Photographs, see Box 30
- Box 14 of 35      Swiss Foundation for Alpine Research, 1961-1962

Box 15

Indian Rhinoceros

- Box 15 of 35      Notebook, 1972
- Note: Indian Rhinoceros Photographs, see Box 28
- Box 15 of 35      Project, 1972-1974 (2 folders)
- Box 15 of 35      Transcriptions from tapes, 1972 (2 folders); see Box 26 for tapes (11 reels)
- Kob, 1956-1974
- Box 15 of 35      Aerial photography, correspondence, 1961
- Box 15 of 35      Aerial counts, 1961
- Box 15 of 35      Age determination, 1957-1958, 1963-1964
- Box 15 of 35      Attachment to territorial grounds. Audio recordings, dictabelts, 1959, 1962-1963; tape, 1972, see Boxes 26-27
- Box 15 of 35      Autopsy sheets, 1962-1964
- Box 15 of 35      Bookkeeping, 1962-1964
- Box 15 of 35      Budget, 1962-1965
- Note: Kob Charts and graphs, see Box 35 and Oversize; also photographs, see Boxes 28-31
- Box 15 of 35      Collection numbers
- Box 15 of 35      Comparison of activities of single-territorial and territorial ground (TG) males, 1963-1964
- Box 15 of 35      Computer

- Box 15 of 35 Data based on transcribed field notes
- Box 15 of 35 Diagrams showing kob movements in TG 3
- Box 15 of 35 Diagrams showing kob movements in TG 6
- Box 15 of 35 Diagrams (including photographs), TG 3 and TG 6
- Box 15 of 35 Distribution of observations of tagged kob in relation to territorial grounds
- Box 15 of 35 Distribution of tagged kob during surveys, 1963-1964
- Box 15 of 35 Duration of stay on territorial grounds
- Box 15 of 35 "Ecological and behavioral aspects of reproduction in the African kob," draft and background statements, 1968
- Box 15 of 35 "Ecology of the Uganda kob, *Adenota kob thomasi*, NEUMANN, in the Queen Elizabeth National Park, Uganda," thesis by Kishorchandra Ladhubhai Modha (xerox copy) (2 folders)
- Box 15 of 35 Fawns, tagged and captive
- Box 15 of 35 Female and young, TG 6 and TG 7, 1962-1963
- Box 15 of 35 Field notebook, 1958 (Helmut K. Buechner)
- Box 15 of 35 Field notebook, 1959 (Helmut K. Buechner)
- Box 15 of 35 Field notebook, October 15, 1962-May 21, 1963 (Helmut K. Buechner)
- Box 15 of 35 Field notebook, May 30, 1963-June 22, 1963 (Jimmie Buechner and Hannele Buechner)
- Box 16
- Box 16 of 35 Field notebook, September 13, 1962-June 25, 1963 (Walter Leuthold)
- Box 16 of 35 Field notebook, June 26, 1963-April 4, 1964 (Walter Leuthold)
- Box 16 of 35 Field notebook, 1963 (Bristol Foster, Helmut K. Buechner, and Walter Leuthold)
- Box 16 of 35 Field notebook: Naturally marked kob, 1962-1964 (Walter Leuthold)
- Box 16 of 35 Field notebook: Plant collection, Toro Game Reserve, Uganda, 1962-1964 (Helmut K. Buechner)
- Box 16 of 35 Field notebooks, 1972 (Helmut K. Buechner)
- Box 16 of 35 Field notes and other notes, 1956-1957



- Box 16 of 35                    Field notes, journals and reports, 1956-1957
- Box 16 of 35                    Field notes, journals and reports, 1958
- Box 16 of 35                    Journal, January 1-March 29, 1958
- Box 16 of 35                    Field notes (transcribed from dictabelts), June 16-August 18, 1959
- Box 16 of 35                    Field notes (transcribed from dictabelts), June 16-September 9, 1959
- Box 16 of 35                    Field notes: TG #3, August 29, 1962-July 5, 1963 (transcribed from dictabelts)
- Box 16 of 35                    Field notes: TG #6, September 3, 1962-June 26, 1963 (transcribed from dictabelts)
- Box 16 of 35                    Field notes: TG #7, October 1, 1962-June 11, 1963 (transcribed from dictabelts)
- Box 16 of 35                    Field notes: Helmut K. Buechner and Robert Schloeth, August 9-23, 1962 (transcribed from dictabelts)
- Box 16 of 35                    Field notes: Helmut K. Buechner and Walter Leuthold, October 17, 1962-February 8, 1963 (transcribed from dictabelts)
- Box 16 of 35                    Field notes: general, 1962-1963 (transcribed from dictabelts)
- Box 16 of 35                    Field notes and observations of tagged kob, rough notes, 1963
- Box 16 of 35                    Fighting activities on TG #6 (data based on observations by Dieter Burckhardt), 1963
- Box 16 of 35                    Brian K. Follet correspondence and research, 1965-1967
- Box 16 of 35                    Frozen tissues, 1963
- Box 16 of 35                    "Game cropping in Uganda," by John A. Bindernagel, 1968
- Box 16 of 35                    Graphs, growth curves
- Box 16 of 35                    Grass burning, 1962-1964
- Box 16 of 35                    Gross ovary analysis, 1963
  
- Box 17
  
- Box 17 of 35                    Gross ovary analysis, 1964 (2 folders)
- Box 17 of 35                    Herd composition counts, 1962-1963
- Box 17 of 35                    Herd counts and surveys, 1962-1964

- Box 17 of 35 Histories of tagged males - tables, 1962-1964
- Box 17 of 35 Immobilization, 1962-1964
- Box 17 of 35 Immobilization drugs and equipments, including correspondence, 1960-1969
- Box 17 of 35 Known aged concepti, 1957-1963
- Box 17 of 35 Kob autopsy, Book I, 1957
- Box 17 of 35 Kob autopsy, Book II, 1957-1958
- Box 17 of 35 Kob autopsy, Book III, 1962
- Box 17 of 35 Kob autopsy, Book IV, 1962-1964
- Note: Kob whistling, March 1972, 2 reels tape, see Box 26
- Box 17 of 35 Lactation, 1971
- Box 17 of 35 "Lek territoriality, altruism, and social organization in the Uganda Kob Antelope," proposal, 1973
- Box 17 of 35 "Lek territoriality in social organization and numerical regulation of Uganda Kob antelope," proposal, 1973
- Box 17 of 35 "Lek territory occupancy in male Uganda kob antelope," (undated)
- Box 17 of 35 Length of stay, 1963
- Box 17 of 35 Walter Leuthold: Ph.D. Dissertation, 1965
- Box 17 of 35 Walter Leuthold: "Homing experiments with an African antelope," 1965?
- Box 17 of 35 Walter Leuthold: Notes, reports, and correspondence, 1964-1972
- Box 17 of 35 Maps: correspondence, 1958-1964
- Box 17 of 35 Maps: Murchison Falls National Park
- Box 17 of 35 Maps: Territorial Grounds, Toro Game Reserve, Uganda - drawings and photographs with and without legends and plottings; see Photographs, Boxes 28-31 and Oversize
- Box 17 of 35 Maps: Uganda
- Box 17 of 35 John A. Morrison: "Morphology of ovarian corpora in Uganda kob," 1971
- Box 17 of 35 John A. Morrison: "Postpartum reproductive activity in female Uganda kob, Adenota kob thomasi (NEUMANN)," thesis, 1965

- Box 17 of 35                    National Geographic Society Grant, 1972
- Box 18
- Box 18 of 35                    National Geographic Society Grant - Trip, 1972
- Box 18 of 35                    National Institute of Health: "The role of ovulations in Uganda kob," proposal, 1965-1968
- Box 18 of 35                    National Science Foundation (NSF): grant #8613, 1959
- Box 18 of 35                    NSF: grant #GB2150, budget, 1964-1965
- Box 18 of 35                    NSF: reports to, 1962-1964
- Box 18 of 35                    Naturally marked (NM) kob: TG #3, #6, and #7, 1962-1964
- Box 18 of 35                    Nomenclature
- Box 18 of 35                    Notes on tagged males, 1971-1972
- Box 18 of 35                    Numbers of kob (tagged, lost, and observations of)
- Box 18 of 35                    Observations by Dieter Bruckhad, 1963 (transcribed from dictabelts)
- Box 18 of 35                    Observations of female kob
- Box 18 of 35                    Observations of tagged kob (tables)
- Box 18 of 35                    Occupancy of territorial grounds in relation to time (tables)
- Box 18 of 35                    Occupancy of territories, 1963-1964
- Box 18 of 35                    Outline for book, 1965-1969
- Box 18 of 35                    Ovary data
- Box 18 of 35                    Parasitic Worms, 1958-1964. Photographs, see Boxes 28-31
- Box 18 of 35                    "The postpartum-preconception interval in the Uganda kob," by Helmut K. Buechner and John A. Morrison, 1969
- Box 18 of 35                    "Postpartum reproductive activity in female Uganda kob, *Adenota kob thomasi* (NEUMANN)," by John A. Morrison, 1965
- Box 18 of 35                    Predator kills, 1962-1964
- Box 18 of 35                    Record of duration of stay on TG, and TG diagrams, 1963
- Box 18 of 35                    Record of observations on individual marked kob - Males, TG 3, 1962-1963

- Box 18 of 35 Record of observations on individual marked kob - Males and females, NM, 1963
- Box 18 of 35 Record of observations on individual marked kob - Males, TG 6 and other TGs (4, 10, 13, 17), 1962-1963
- Box 18 of 35 Record of observations on individual marked kob - Males, TG 7, 1962-1963
- Box 18 of 35 Record of observations on individual marked kob - Naturally marked (NM) kob, TG 3, 6, 7, 1962-1964
- Box 18 of 35 Record of observations on individual marked kob - Tagged females and young, TG 3, 1963
- Box 18 of 35 Record of visits on territorial grounds and association of marked males on territorial grounds
- Box 18 of 35 References
- Box 18 of 35 Reproduction, 1957-1964
- Box 18 of 35 Reproduction data, 1957-1958
- Box 19
- Box 19 of 35 Reproductive and gestation charts, 1957-1958
- Box 19 of 35 Research proposals
- Box 19 of 35 H. Daniel Roth: tables
- Box 19 of 35 San Diego Zoo
- Box 19 of 35 Single territorial males, 1963-1964
- Box 19 of 35 Single territory - males
- Box 19 of 35 SELGEM kob files, 1972
- Box 19 of 35 "Supremacy and patterns of lek territory occupancy among the male Uganda kob antelope," by Helmut K. Buechner
- Box 19 of 35 "A survivorship curve for the Uganda kob," by John Manarch, 1964
- Box 19 of 35 "The system of lek territory occupancy in male Uganda kob antelope," by Helmut K. Buechner and H. Daniel Roth, 1973
- Box 19 of 35 "System of territorial occupancy by male Uganda kob antelope"
- Box 19 of 35 Tables
- Box 19 of 35 Tag records, June - August 1959

- Box 19 of 35 Tagged fawns, 1962-1964
- Box 19 of 35 Tagged kob, summary, 1963
- Box 19 of 35 Tagging system, 1962
- Box 19 of 35 "Territorial and reproductive behavior in Uganda kob," by Helmut K. Buechner, 1961 (NSF grant #8613)
- Box 19 of 35 Territorial ground observations, 1963 (2 folders)
- Box 19 of 35 Tooth: age structure based on tooth sections - survival rate
- Box 19 of 35 Tooth replacement
- Box 19 of 35 Toro Game Reserve
- Box 19 of 35 University of Chicago Press, 1973-1975
- Box 19 of 35 Walther, Fritz, sketches (drawn from photographs by Walter Leuthold), 1966
- Box 19 of 35 Weight determination, 1963
- Box 19 of 35 Weights of ovaries
- Box 19 of 35 Kob miscellaneous
- Mule Deer
- Box 19 of 35 "Analyses of ovaries from deer harvested in northwestern Montana," 1956 (tables and notes, probably used in an article)
- Pronghorn Antelope
- Box 19 of 35 Antelope food plants and flora of the Trans-Pecos region of Texas, 1946-1947 (index cards)
- Box 20
- Box 20 of 35 Journal, 1946-1947
- Box 20 of 35 Notes, 1947
- Note: Pronghorn Antelope Photographs, see Boxes 28-31
- Box 20 of 35 Printed materials, 1958-1965 (3 folders)
- Box 20 of 35 "Range use and ecology of the pronghorned antelope in the Trans-Pecos region of Texas," by Helmut K. Buechner, 1946-1947 (quarterly reports #1-4) (4 folders)

- Box 20 of 35 Reports to Texas Cooperative Wildlife Research Unit, 1946-1947
- Box 20 of 35 Wichita Mountains National Wildlife Refuge, 1949
- Roan and Sable Antelope Study
- Box 20 of 35 Hannele Buechner: Observations, National Zoological Park, 1974
- Box 20 of 35 Sally Mackler: Observations, National Zoological Park, 1974
- Box 20 of 35 National Geographic Society, proposal, 1974
- Box 20 of 35 Christine Schoenwald: Study proposals, 1974
- Box 20 of 35 Ranka Sekulic: Correspondence and observation reports, Shimba Hills, Kenya, 1973-1974
- Satellite Tracking of Animals
- Box 20 of 35 Advanced Applications Flight Experiments (AAFE) - Proposal to NASA, 1971
- Box 20 of 35 AMES meeting, February 14, 1973
- Box 20 of 35 "Animal tracking from satellites," report from the Smithsonian Astrophysical Observatory (SAO), 1968
- Box 20 of 35 "An applied research program in wildlife biotelemetry," University of Wyoming
- Box 20 of 35 BIAC Special Report, "Some prospects for using communication satellites in wild animal research," 1966
- Box 20 of 35 "Biological problems of bird movements capable of solution using satellite-telemetry," by David G. Nicholls, 1970-71 (proposal)
- Box 20 of 35 Biotelemetry Symposium, Pretoria, South Africa, December, 1971 (2 folders)
- Box 20 of 35 Correspondence (criticism of project and Monique's death, 1970-1971)
- Box 20 of 35 "Development of satellite-related biotelemetry equipment," progress report, July 1971
- Box 20 of 35 Diagrams
- Box 20 of 35 Earth resources satellites, 1972
- Box 20 of 35 East African trip - NASA, 1972
- Box 21
- Box 21 of 35 Elephants at Tsavo National Park, Kenya (NASA proposal), 1971-1973 (2 folders)

- Box 21 of 35 Elk tracking - publicity, 1970
- Box 21 of 35 Interrogation, Recording, and Location System (IRLS): General correspondence, 1970-1971
- Box 21 of 35 IRLS: General correspondence, 1966-1969
- Box 21 of 35 IRLS for study of polar bears, 1970
- Box 21 of 35 IRLS tracking of African elephants, 1966-1972
- Box 21 of 35 IRLS tracking of elks - first progress report, October 14, 1969
- Box 21 of 35 IRLS tracking of elks - second progress report, April 18, 1970
- Box 21 of 35 IRLS tracking of marine animals, 1966
- Box 21 of 35 Maxwell, James C. - animal tracking of large free roaming animals proposal, 1972
- Box 21 of 35 Meetings, 1968-1969
- Box 21 of 35 Meetings, 1970-1971 (2 folders)
- Box 21 of 35 Meetings, April 23-26, 1973
- Box 21 of 35 Memorandum of Understanding, 1971
- Box 21 of 35 National Goal of Environmental Enhancement Conference, April 23-27, 1973
- Note: Satellite Tracking Photographs, see Boxes 28-31
- Box 21 of 35 Printed materials (2 folders)
- Box 22
- Box 22 of 35 "Proposal for an experiment to track animals from artificial satellites," by Helmut K. Buechner and James C. Maxwell, 1968
- Box 22 of 35 "A rationale for animal tracking by satellite," by Helmut K. Buechner, John J. Craighead, Frank C. Craighead, and Charles E. Cote, 1970 (proposal)
- Box 22 of 35 Remote sensing, proposal, 1967-1970 (2 folders)
- Box 22 of 35 "Report on 1973 Santa Cruz Summer Study on Wildlife Resources Monitoring," Vol. I-II, NASA
- Box 22 of 35 "Satellite animal tracking by Doppler Technique," proposal by Dale W. Jenkins and Helmut K. Buechner, 1970
- Box 22 of 35 Satellite Animal Tracking Feasibility Studies, Proposal, August 1970

- Box 22 of 35                      Satellite Animal Tracking Feasibility Studies, Proposal, 1971-1974
- Box 22 of 35                      "Satellite (IRLS) tracking of elk": annual report, 1970
- Box 22 of 35                      "Satellite (IRLS) tracking of elk": background statement, 1970
- Box 22 of 35                      "Satellite (IRLS) tracking of elk": Contract, NASW, 1983
- Box 22 of 35                      "Satellite (IRLS) tracking of elk": financial statement, 1973
- Box 22 of 35                      "Satellite (IRLS) tracking of elk": proposal by Helmut K. Buechner, 1969
- Box 22 of 35                      "Satellite (IRLS) Tracking of Elk in Yellowstone National Park and Caribou in Alaska," proposal by Helmut K. Buechner, 1969
- Box 22 of 35                      "Satellite Monitoring of Black Bears" as submitted to *Bioscience*, 1971
- Box 22 of 35                      Satellite Systems Survey
- Box 22 of 35                      "Satellite Tracking of Caribou," proposal by Helmut K. Buechner, 1970
- Box 22 of 35                      "Satellite Tracking of Elk," *Science*, 1971
- Box 22 of 35                      "Satellite Wildlife Research Program," proposal, 1970
- Box 22 of 35                      "Satellite Wildlife Research Program," Final technical report, 1972
- Box 22 of 35                      "Status Report for the Annual Report of National Air and Space Council," November 1969
- Box 22 of 35                      "Status Report on the Development of a Program in the Tracking and Monitoring of Animals by Satellite," June 1971
- Box 22 of 35                      Status Report - "Satellite Tracking of Elk and Green Sea Turtles," March 1971
- Box 22 of 35                      Survey of animal tracking, Raytheon consultant work, 1971
- Box 23
- Box 23 of 35                      Symposium on Animal Orientation and Navigation, Wallops Station, Virginia, September 9-13, 1970 (2 folders)
- Box 23 of 35                      Tracking green turtles by satellite study, 1970-1972
- Box 23 of 35                      Tracking of elk: semi-annual report, 1970
- Box 23 of 35                      "The Tropical Wind, Energy Conversion and Reference Level Experiment (TWERLE)," guide for user, 1972
- Box 23 of 35                      "TWERLE Data User Output Formats," 1974



- Box 23 of 35                    "Wildlife Movement and Tracking Systems," bibliography
- Box 23 of 35                    Wildlife Research Program - Phrase I report, 1971
- Box 23 of 35                    Miscellaneous data and field notes, probably collected during class  
excursions, 1952-1956, on the following animals: elk, deer, mule deer, white  
tail deer, pheasants, valley quail, grouse, waterfowls, mountain goats, small  
mammals, and grizzly bear.

*[Return to Table of Contents](#)*

**Series 5: THESES BY FORMER STUDENTS, COLLECTED BY HELMUT K.  
BUECHNER. ARRANGED CHRONOLOGICALLY, 1951-1960.**

Box 23

- |              |   |
|--------------|---|
| Box 23 of 35 | "Land use and wildlife on farms in southeastern Washington," by Eugene S. Dziedzic, 1951  |
| Box 23 of 35 | "Studies of blue grouse, <i>Dendragapus Obscurus Pallidus Swarth</i> , in the Methow Valley of Washington," by Byron Arthur Schottelius, 1951 |
| Box 23 of 35 | "Ecology of the Marten in the Twin Lakes areas, Chelan County, Washington," by Fletcher Eugene Newby, 1951                                    |
| Box 23 of 35 | "Studies on reproduction in beaver," by Ernest Edmund Provost, 1953   |
| Box 23 of 35 | "Reproductive performance of black-tailed deer on the Clemons Tree Farm, Western Washington," by Frank B. Golley, 1954                        |
| Box 23 of 35 | "Population dynamics of the elk in the Blue Mountains of southeastern Washington," by Philip Joel Urness, 1960                                |
| Box 23 of 35 | "Reproductive cycle of chukar partridge," by Richard John Mackie, 1960  |

*[Return to Table of Contents](#)*

## Series 6: ABSTRACTS, ARTICLES, AND BOOK REVIEWS, 1942-1974.

This series consists of published abstracts, articles, and book reviews written or co-authored by Helmut K. Buechner, and is arranged chronologically. Some folders contain only correspondence and notes. See "List of Publications" (Box 23) for titles.

### Box 23

- |              |   |
|--------------|---|
| Box 23 of 35 | List of Publications  |
|              | Abstracts   |
| Box 23 of 35 | Emergent evolution as applied to ecology, 1941  |
| Box 23 of 35 | Forage Competition between the Pronghorned Antelope and Domestic Sheep in Trans-Pecos Texas, 1949 |
| Box 23 of 35 | A Holistic Approach to Ecology, 1949  |
| Box 23 of 35 | Feasibility of tracking free-roaming animals in natural environments, 1970                        |
|              | Articles  |
| Box 23 of 35 | Relationship of Game and Livestock to Range Vegetation in Kerr County, Texas, 1943                |
| Box 23 of 35 | The Range Vegetation of Kerr County, Texas, in Relation to Livestock and White-Tailed Deer, 1944  |
| Box 23 of 35 | Birds of Kerr County, Texas, 1946   |
| Box 23 of 35 | Livestock-Antelope Relationship in West Texas, 1947   |
| Box 23 of 35 | The Antelope Situation, 1948  |
| Box 23 of 35 | Bioecology and Biocenology in Wildlife Education, 1950  |
| Box 23 of 35 | Range Ecology of the Pronghorn on the Wichita Mountains Wildlife Refuge, 1950                     |
| Box 23 of 35 | An Evaluation of Restocking with Pen-Reared Bobwhite, 1950  |
| Box 23 of 35 | Use of the Helicopter in Wildlife Work, 1950  |
| Box 23 of 35 | Censusing Elk by Airplane in the Blue Mountains of Washington, 1950                               |
| Box 23 of 35 | Hunting the Pronghorn Phantom of the Desert, 1951   |
| Box 23 of 35 | Winter-Range Utilization by Elk and Mule Deer in Southeastern Washington, 1952                    |

- Box 23 of 35                    Game Conservation and the Hunter, 1952
- Box 23 of 35                    Does are Deer Too, 1952
- Box 23 of 35                    An Eighty-Per Cent Turnover Period as a Comparative Criterion in Avian Populations, 1953
- Box 23 of 35                    Some Biotic Changes in the State of Washington, Particularly During the Century 1853-1953, 1953
- Box 23 of 35                    Teaching and Integrated Course in the Biological Sciences, 1953
- Box 23 of 35                    The Use of Composition from Harvest Data in Determining Mortalities of Deer and Elk Populations, 1953
- Box 24
- Box 24 of 35                    Increased Natality Resulting from Lowered Population Density Among Elk in Southeastern Washington, 1954
- Box 24 of 35                    Bighorn Sheep, 1955: Problems in the Management of Bighorn Sheep, 1955
- Box 24 of 35                    A Prospectus of Bighorn Sheep Populations in the United States, 1955
- Box 24 of 35                    West Gallatin Elk Study (by Joe Gaab?), 1955
- Box 24 of 35                    The Well-Managed Elk Herd, 1956
- Box 24 of 35                    Four Cases of Hybridization between Mule Deer, *Odocoileus hemionus hemionus* (Rafinesque), and White-Tailed Deer, *Odocoileus virginianus ochrourus* (Bailey), in the State of Washington, 1956
- Box 24 of 35                    The Future of Bighorn Sheep, 1956
- Box 24 of 35                    Secondary Ovulation of Elks, 1956
- Box 24 of 35                    Three Additional Records of Antlered Female Deer, 1957
- Box 24 of 35                    Articles for "Good Land Management Supports Wildlife," 1957
- Box 24 of 35                    The Fulbright Wildlife Program in Uganda, 1958
- Box 24 of 35                    Causes of Vegetational Changes on Butiaba Flats and the Adjacent Escarpment, 1957
- Box 24 of 35                    Bighorn Sheep in the United States, 1960
- Box 24 of 35                    Recent Advances in Field Immobilization of Large Mammals with Drugs, 1960
- Box 24 of 35                    Immobilizing Uganda Kob with Succinylcholine Chloride, 1960

- Box 24 of 35                      Field Immobilization of African Animals, 1960
- Box 24 of 35                      The Technique of Immobilization of Wild Animals as an Aid to Management and Control, 1960
- Box 24 of 35                      Territorial Behavior in Uganda Kob, Adenota Kob Thomasi, 1960
- Box 24 of 35                      Regulation of Numbers of Pronghorn Antelope in Relation to Land Use, 1960
- Box 24 of 35                      Unilateral Implantation in the Uganda Kob, 1961
- Box 24 of 35                      Vegetation Change Induced by Fire and Elephant in Murchison Falls National Park, Uganda, 1960
- Box 24 of 35                      The Use of Succinylcholine Chloride in Immobilizing North American Elk, 1960-1962
- Box 24 of 35                      Training Programmes for Personnel Concerned with Conservation of African Wild Animals, 1961
- Box 24 of 35                      Elephant Census: Numbers and Migration Of Elephants in Murchison Falls National Park, Uganda, 1962-1963
- Box 24 of 35                      The Animal Reproductive Cycle of Chukar Partridge, 1962-1963
- Box 24 of 35                      Kob: Territoriality as a Behavior Adaption to Environment in Uganda Kob, 1963
- Box 24 of 35                      Ceremonial Mating Behavior in Uganda Kob by Helmut K. Buechner and Robert Schloeth, 1964 (3 folders)
- Box 24 of 35                      Reproduction in Uganda Kob with Special Reference to Behavior, 1964
- Box 24 of 35                      Elephant Survey: Report on the Potential Conflict between Elephants and Agriculture in the Proposed Tana River Irrigation Scheme, 1965
- Box 24 of 35                      Ecosystem Science as a Point of Synthesis, by S. Dillon Ripley and Helmut K. Buechner, *Daedalus*, Fall 1967
- Box 24 of 35                      Preliminary Estimation of Energy Flow in Uganda Kob (Adenota Kob Thomasi, Neumann), 1967
- Box 24 of 35                      International Biological Programme (IBP) Handbook No. 7, 1968
- Box 24 of 35                      Herbal Control of Vegetation, 1968
- Box 24 of 35                      The Opening between the Allantoic Vesicle and the Uterine Cavity in the Kob Conceptus, 1969
- Box 24 of 35                      The Human Ecosystem, 1970

- Box 24 of 35                    The Avifauna of Northern Latin America: A Symposium Held at the Smithsonian Institution, 13-15 April 1966, 1971
- Box 24 of 35                    The Ecosystem Level of Organization, 1971
- Box 25
- Box 25 of 35                    Radiotelemetry for Research on Large Land Mammals, 1971
- Box 25 of 35                    Satellite Tracking: Satellites for Research on Free-Roaming Animals, *BioScience*, 1971
- Box 25 of 35                    Lek Behavior in the Uganda Kob, *Zoonoos*, 1971
- Box 25 of 35                    Satellite Tracking: Satellite and Ground Radiotracking of Elk, January 1971, as Submitted BIAC for Wallops Island Symposium
- Box 25 of 35                    The Lek System in Uganda Kob Antelope, manuscript, 1974
- Box 25 of 35                    Implications of Social Behavior in the Management of Uganda Kob, 1974
- Book Reviews
- Box 25 of 35                    *Conservation of Natural Resources*, Guy-Harold Smith, Editor, 1950
- Box 25 of 35                    *Evolution at the Population Level with Special Reference to Game Animals and Practical Game Management*, Paavo Voipio, 1950
- Box 25 of 35                    *Practice of Wildlife Conservation*, Leonard W. Wing, 1951
- Box 25 of 35                    *American Wildlife and Plants*, Alexander C. Martin, Herbert S. Zim, and Arnold L. Nelson, 1951
- Box 25 of 35                    *Uncle Sam in the Pacific Northwest*, Charles McKinley, 1952
- Box 25 of 35                    *The Stage Grouse in Wyoming*, Robert L. Patterson, 1953
- Box 25 of 35                    *Wildlife Management - Fur Bearers, Waterfowls, and Fish*, Rueben Edwin Trippensee, 1953
- Box 25 of 35                    *Our Wildlife Legacy*, D. L. Allen, 1954
- Box 25 of 35                    *Imbalance between Man and Environment*, H. K. Buechner, 1956
- Box 25 of 35                    *Pelican in the Wilderness*, F. Fraser Darling, 1956
- Box 25 of 35                    *Man-Eaters of India*, Jim Corbett, 1957
- Box 25 of 35                    *Animal Dispersion in Relation to Social Behavior*, V. C. Wynne-Edwards, 1961
- Box 25 of 35                    *Conservation of African Wildlife*, H. K. Buechner, 1964

- Box 25 of 35                    *Africa: A Natural History*, Leslie Brown, 1965
- Box 25 of 35                    *So Human and Animal*, Rene Dubos, 1968
- Box 25 of 35                    *Nature's Paradise*, Jen and Des Bartlett, 1967
- Box 25 of 35                    *The Zoology of Tropical Africa*, J. L. Cloudsley-Thompson, 1969; *Animal Twilight: Man and Game in Eastern Africa*, J. L. Cloudsley-Thompson, 1969
- Box 25 of 35                    *The World of the Pronghorn*, Joe Van Wormer, 1969
- Box 25 of 35                    *The Tule Elk*, Dale R. McCullough, 1969
- Box 25 of 35                    *The Serengeti Lion: A Study of Predator-Prey Relations*, George B. Schaller, 1972
- Box 25 of 35                    *Mountain Sheep: A Study in Behavior and Evolution*, Valerius Geist, 1971
- Box 25 of 35                    *The effect of the Lesser Vegetation of Certain Adirondack Forest Types with Particular Reference to Deer and Grouse*, F. B. Barick, 1950
- Box 25 of 35                    *Adaption to Cold in Arctic and Tropical Mammals and Birds in Relation to Body Temperature, Insulation and Basal Metabolic Rate*, P. F. Scholander, Raymond Hock, Vladimir Walters, and Lawrence Irving, 1950
- Box 25 of 35                    *Body Insulation of Some Arctic and Tropical Mammals and Birds*, P. F. Scholander, Raymond Hock, Vladimir Walters, and Lawrence Irving, 1950
- Box 25 of 35                    *Heat Regulation in Some Arctic and Tropical Mammals and Birds*, P. F. Scholander, Raymond Hock, Vladimir Walters, Fred Johnson, and Lawrence Irving, 1950
- Box 25 of 35                    *History and Status of the Ring-Necked Pheasant in Missouri*, Donald M. Christisen, 1951
- Box 25 of 35                    *Journal of Wildlife Management*, 1951
- Box 25 of 35                    *The Interstitial Cycle in Relation to Autumn and Winter Sexual Behavior in Birds*, A. J. Marshall, 1952
- Box 25 of 35                    *Journal of Wildlife Management*, 1952
- Box 25 of 35                    *Journal of Wildlife Management*, 1953
- Box 25 of 35                    *A Guide to Bird Finding West of the Mississippi*, Olin Sewall Pettingill, Jr., 1953
- Box 25 of 35                    *Journal of Animal Management*, 1954
- Box 25 of 35                    *Journal of Animal Management*, 1956

- Box 25 of 35                      NSF - News Report, 1965
- Box 25 of 35                      *The Subversive Science*, Paul Shepard and Daniel McKinley, Editors, 1969
- Box 25 of 35                      *Man on Earth: Environmental Problems in Perspective*, Sterling Brubaker,  
1971
- Box 25 of 35                      *A Practical Guide to the Study of the Productivity of Large Herbivores*, edited  
by Frank B. Golley and H. K. Buechner, 1969
- Box 25 of 35                      Abstract: *Encyclopedia Britannica*
- Box 25 of 35                      Elsevier's Animal Encyclopedia: *Pronghorn and Bison*, 1969

[Return to Table of Contents](#)



## Series 7: LECTURES, SEMINARS, AND SYMPOSIA. ARRANGED CHRONOLOGICALLY, 1949-1974.

### Box 25

- Box 25 of 35                      Symposium on the Influence of the Severe Winter of 1948-1949 on Wildlife, March 2, 1949
- Box 25 of 35                      Symposium on Population Fluctuations, 1964
- Box 25 of 35                      Symposium on Reproduction in Mammals, 1964
- Box 25 of 35                      AIBS/SI Workshop, May 27, 1966
- Box 25 of 35                      HEW - National Institute of Health Seminars, August 20, 1969
- Box 25 of 35                      St. Alban's School, October 20, 1969
- Box 25 of 35                      Environmental Management Seminar, Harpers Ferry, December 18, 1969
- Box 25 of 35                      National Science Foundation Seminar: Workshop Conference on Environmental Education, April 6-7, 1970
- Box 25 of 35                      Earth Week - Smithsonian Institution, April 23-30, 1970
- Box 25 of 35                      Planned Parenthood, Southeast Region Council Meeting, Savannah Georgia, May 8, 1970
- Box 25 of 35                      Game Cropping, Catholic University, July 31, 1970
- Box 25 of 35                      AIBS Symposium on Animal Orientation and Navigation, Wallops Island, Virginia, September 9-13, 1970
- Box 25 of 35                      The Society for Environmental Development - October 14, 1970
- Box 25 of 35                      Human Ecology Seminar, George Washington University, November 19, 1970
- Box 25 of 35                      AMES Research Center: Investigations in Terrestrial Biology Using Aerospace Vehicles, January 21-22, 1971
- Box 25 of 35                      National Association for Research in Science Teaching, Silver Spring, Maryland, March 23-25, 1971
- Box 25 of 35                      Ice Age Survivors - The role of man in the environment, UCLA, June 5, 1971
- Box 25 of 35                      Plains Animals in Africa, UCLA, June 5, 1971
- Box 25 of 35                      "The Challenge for Survival," Audubon Naturalist Society, Washington, D. C., September 22, 1971

- Box 25 of 35 International Telemetry Conference, Washington, D. C., September 27-29, 1971
- Box 25 of 35 Social Organization and Environment, Franklin and Marshall College, Lancaster, Pennsylvania, October 5-6, 1971
- Box 25 of 35 "Territoriality and Ceremonial Mating Behavior of the Uganda Kob," University of Maryland, October 12, 1971
- Box 25 of 35 Conference on "The Behavior of Ungulates and Its Relation to Management," University of Calgary, Alberta, November 2-6, 1971
- Box 25 of 35 "The Uganda Kob: Territorial and Ceremonial Mating Behavior," AAAS meeting, Philadelphia, Pennsylvania, December 28, 1971
- Box 25 of 35 Audubon Naturalist Society, February 2, 1972
- Box 25 of 35 National Institute of Health, Poolesville, Maryland, May, 1972
- Box 25 of 35 Juniata College, Huntingdon, Pennsylvania, May 4, 1972
- Box 25 of 35 Wildlife Diseases Conference, University of Connecticut, Storrs, Connecticut, August 24, 1973
- Box 25 of 35 Mount Vernon College, Virginia, September 18, 1973
- Box 25 of 35 Audubon Naturalist Society, January 21, 1974
- Box 25 of 35 Endangered Species Symposium, 1974

*[Return to Table of Contents](#)*

## Series 8: AUDIO RECORDINGS, 1959-1972.

### Box 26

- Box 26 of 35 Elk Immobilization, February 19, 1970, 1 reel
- Box 26 of 35 Panel on Environmental and Development, Washington Chapter of S. I. D., Lester Brown, Chairman, (no date), 1 reel
- Box 26 of 35 Earth Week Symposium, April 1969, 4 reels
- Box 26 of 35 Kob Whistling, Uganda, March 1972, 2 reels
- Box 26 of 35 Indian Rhinoceros - observations of mating behavior of Rajikumari and Tarun at the National Zoological Park, July-October 1972 (see Box 15 for transcripts), 11 reels

### Box 27

- Dictabelts (See Box 16 for transcripts)
- Box 27 of 35 Field Notes, April 14, 1959
- Box 27 of 35 Field Notes, June 13, 1959
- Box 27 of 35 Correspondence, June 15, 1959
- Box 27 of 35 Semliki Game Reserve, June 16-20, 1959
- Box 27 of 35 Correspondence, June 22, 1959 (2 envelopes)
- Box 27 of 35 Kenya - Giraffe and Kob, June 23-26, 1959
- Box 27 of 35 Semliki Game Reserve, July 8-13, 1959
- Box 27 of 35 Field Notes, July 14-17, 1959
- Box 27 of 35 Semliki Game Reserve, July 18-20, 1959
- Box 27 of 35 Field Notes, July 24-26, 1959
- Box 27 of 35 Field Notes, Received July 31, 1959
- Box 27 of 35 Correspondence, July 30, 1959
- Box 27 of 35 Field Notes, Received August 5, 1959
- Box 27 of 35 Field Notes, August 1-3, 1959
- Box 27 of 35 Elephant Aerial Count, August 6-9, 1959

Box 27 of 35                      Field Notes and Correspondence, August 14-18, 1959

Box 27 of 35                      Field Notes, August 20-23, 1959

Box 27 of 35                      Field Notes, August 23-27, 1959

Box 27 of 35                      Field Notes, Received September 8, 1959

Box 27 of 35                      Field Notes, September 7-9, 1959

Box 27 of 35                      Field Notes, Received September 12, 1959

Box 27 of 35                      Unidentified Field Notes, 1959

Box 27 of 35                      Correspondence, 1959

Box 27 of 35                      Story for *Reader's Digest*, 1959

Box 27 of 35                      Field Notes, October 12-16, 1962

Box 27 of 35                      Field Notes - covering locations of old and new TG; also immobilization and transplanting male kob; October 23, 1962

Box 27 of 35                      Field Notes, Fred Leuthold, October 30, 1962

Box 27 of 35                      Field Notes, J. Morrison, November 10, 1962

Box 27 of 35                      Field Notes, November 24, 1962 (2 envelopes)

Box 27 of 35                      Field Notes, November 28, 1962

Box 27 of 35                      Field Notes, December 28, 1962

Box 27 of 35                      Field Notes, December 1962-January, 1963 (2 envelopes)

Box 27 of 35                      Correspondence?, January 13, 1963

Box 27 of 35                      Field Notes, Transcribed February 18, 1963

Box 27 of 35                      Field Notes, February 28, 1963

Box 27 of 35                      Field Notes, May 8, 1963

Box 27 of 35                      Field Notes, May 15, 1963

Box 27 of 35                      Field Notes, Transcribed May 20, 1963

Box 27 of 35                      Field Notes, TG 7, May 25, 1963 (2 envelopes)

Box 27 of 35                      Field Notes, May 25, 1963

Box 27 of 35                      Field Notes, TG 6, May 26-27 and pm of June 1, 1963

Box 27 of 35	Field Notes, May 31, 1963
Box 27 of 35	Field Notes, June 1-2, 1963
Box 27 of 35	Field Notes, TG 3, June 20, 1963
Box 27 of 35	Field Notes, June 24 and July 5, 1963
Box 27 of 35	Unidentified Field Notes, 1963?

*[Return to Table of Contents](#)*

## Series 9: PHOTOGRAPHS. ARRANGED BY SUBJECT.

### Box 28

#### Prints

- Box 28 of 35 African Animals - Immobilizing
  - Box 28 of 35 Bighorn Sheep (3 folders)
  - Box 28 of 35 Bighorn Sheep: Photographs used in book
  - Box 28 of 35 Caribou: 16 mm film strips
  - Box 28 of 35 Elk: Yellowstone National Park Winter Elk Range
  - Box 28 of 35 Elk jaws: 6 months - 21 years
  - Box 28 of 35 Elephant study, Kenya, 1965
  - Box 28 of 35 Kob, taken by Walter Leuthold
  - Box 28 of 35 Kob: Diagrams and graphs
  - Box 28 of 35 Kob: Color photographs
  - Box 28 of 35 Kob: Photographs of fetuses, 1965
  - Box 28 of 35 Kob: Sketches by Fritz Walther
  - Box 28 of 35 Kob: Black and white photographs
  - Box 28 of 35 Kob
  - Box 28 of 35 Meetings
  - Box 28 of 35 Pronghorn
  - Box 28 of 35 Pronghorn: Photographs used for PhD. Thesis
  - Box 28 of 35 Satellite Tracking of Elk (includes slides)
  - Box 28 of 35 Vegetation: Blue Mountains, Washington
  - Box 28 of 35 Washington State's Pomeroy Ranger District (SE Washington), map
- #### Negatives
- Box 28 of 35 Bighorn Sheep
  - Box 28 of 35 Elephant Study, Kenya, 1965

- Box 28 of 35 Pronghorn
- Box 28 of 35 Elk
- Box 28 of 35 Kob
- Slides
- Box 28 of 35 Indian Rhinoceros, 1972-1974
- Box 28 of 35 Kob, Toro Game Reserve, Uganda, 1972
- Box 28 of 35 NZP Animals and Miscellaneous, 1974; 1972 Flood at NZP
- Box 28 of 35 Rampart dam (location and date unknown), color transparencies
- Box 28 of 35 Satellite tracking
- Box 28 of 35 Ungulates (NZP): used for AAZPA meeting, May 21, 1974
- Box 29
- Box 29 of 35 Pronghorn Antelope; Oklahoma National Wildlife Refuge; Washington State Blue Mountains Vegetation, 1947-1954  
[Image\(s\): Frank Harbert and Fred Zwickel at Mill Creek Watershed, by Helmut K. Buechner, March 1949. \[Image no. SIA2014-00006\]](#)  
[Image\(s\): "Mountain Boy" Buss, satisfied after killing yearling and elk at Hardy Ridge \[Washington\], by Helmut K. Buechner, November 1949. \[Image no. SIA2014-00007\]](#)  
[Image\(s\): \[View of car by campsite\] during deer season at Hardy Ridge \[Washington\], by Helmut K. Buechner, October 1949. \[Image no. SIA2014-00008\]](#)  
[Image\(s\): Sunset at Weikswood, by Helmut K. Buechner, September 1952. \[Image no. SIA2014-00009\]](#)  
[Image\(s\): Fertility erosion on ridge tops, 15 miles southwest of Pullman, Washington, by Helmut K. Buechner, March 1953. \[Image no. SIA2014-00010\]](#)  
[Image\(s\): 10 miles south of Pullman, Washington, on US 195 \(?\), by Helmut K. Buechner, February 1953. \[Image no. SIA2014-00011\]](#)  
[Image\(s\): Example of nearly natural vegetation, by Helmut K. Buechner, June 5, 1953. \[Image no. SIA2014-00012\]](#)
- Box 29 of 35 Bighorn Sheep: Arizona, California, Nevada, 1955
- Box 29 of 35 Bighorn Sheep: California, 1955
- Box 29 of 35 Bighorn Sheep: Idaho, Montana, Utah, 1954
- Box 29 of 35 Bighorn Sheep: Colorado, Wyoming, 1954

[Image\(s\): Herd seen in vicinity of Jackson Hole, Wyoming, by Helmut K. Buechner, 1954. \[Image no. SIA2014-00013\]](#)

Box 29 of 35                      Bighorn Sheep: Rocky Mountains

Box 30

Box 30 of 35                      Bighorn Sheep: Yellowstone National Park, Wyoming, 1954

Box 30 of 35                      Bighorn Sheep (miscellaneous); Hybrid Deer; Elk; Kob (negatives)

Prints

Box 30 of 35                      Bighorn Sheep

Box 30 of 35                      Cougar

Box 30 of 35                      Elk

Box 30 of 35                      Ibex, 1961 (2 folders)

Box 30 of 35                      Vegetation, 1942

Box 30 of 35                      Pronghorn, 1947 (3 folders)

[Image\(s\): Doe with fawns about 1 hour old at Up & Down Ranch, 10 miles northwest of Ft. Davis, Texas, May 28, 1947. By Helmut Cuechner. \[Image nos. SIA2014-00014 to SIA2014-00023\]](#)

Box 30 of 35                      Satellite Tracking, 1970

Box 30 of 35                      Unidentified ungulates

Box 30 of 35                      Utah Cooperative Wildlife Research Unit, 1947

Box 30 of 35                      Vegetation, 1950s (2 folders)

Box 30 of 35                      Wichita Mountains Wildlife Refuge, 1949

Box 30 of 35                      Helmut K. Buechner - Portraits

Box 30 of 35                      Buechner Family, 1944

Box 30 of 35                      Cumming Creek, Blue Mountains, Washington, 1950

Negatives

Box 30 of 35                      Bighorn Sheep Project (6 folders)

Box 31

Box 31 of 35                      Ceylonese Elephant, 1967



Box 31 of 35	Cougar
Box 31 of 35	Deer
Box 31 of 35	Hybrid Deer
Box 31 of 35	Ibex, 1961
Box 31 of 35	Kob (13 folders)
Box 31 of 35	Pronghorn (19 folders)
Box 31 of 35	Elk Census and Vegetation Study (9 folders)
Box 31 of 35	Vegetation
Box 31 of 35	Satellite Tracking, 1970
Box 31 of 35	Avian Population Turnover Concepts
Box 31 of 35	Potholes Reservoir Area, Washington, 1953
Box 31 of 35	Cummings Creek, Blue Mountains, Washington, 1950
Box 31 of 35	Buechner Family, 1947, 1953
Box 31 of 35	Unidentified People
Box 31 of 35	Denis Zaphino, 1959

*[Return to Table of Contents](#)*

## Series 10: NOTEPADS AND DIARY, 1965, 1970-1971.

These volumes contain entries about Buechner's day to day activities; travel; names and addresses of personal acquaintances; notes pertaining to Buechner's projects; and miscellaneous notes of personal interest.

### Box 31

Box 31 of 35	Diary, 1965
Box 31 of 35	Notepad, 1965
Box 31 of 35	Notepads, 1970
Box 31 of 35	Notepads, 1970-1971

*[Return to Table of Contents](#)*

## Series 11: OBSERVATION AND MACHINE READABLE DATA ON THE KOB.

### Box 32

IBM Data Sheets - data on the Uganda kob collected between 1962 and 1964. Data is arranged into "Card" 1-4. "Card" 1-3 consists of the physical measurements. "Card" 4 consists of data on the locations of the Uganda kob within the territorial grounds. For explanation of numbers, see chart in Computer, Box 15.

- Box 32 of 35                      Card 1-3 (Collected Kob), 1962-1964
- Box 32 of 35                      Card 4 (Tagged males TG 3), 1962-1964
- Box 32 of 35                      Card 4 (Tagged males TG 6 and animals of ther TGs), 1962-1964
- Box 32 of 35                      Card 4 (Tagged males TG 7), 1962-1964
- Box 32 of 35                      Card 4 (NM Kob TGs 3, 6, 7), 1962-1964
- Box 32 of 35                      Card 4 (Tagged females and young TGs 3, 6, 7), 1962-1964
- Box 32 of 35                      Additional Kob Data, 1972

### Box 33

- Box 33 of 35                      Printouts - data on the Uganda kob collected during 1962 and 1964, arranged same as above. (4 folders)

### Box 34

- Box 34 of 35                      Printouts - analytical and statistical computations by H. Daniel Roth, mostly unidentified and unarranged, 1972. Also, entry of manuscripts written by Helmut K. Buechner and other computations, 1965.

*[Return to Table of Contents](#)*

## Series 12: DIPLOMAS AND CERTIFICATES, 1938-1966.

### Box 35

- Box 35 of 35                    Alpha Phi Omega, December 11, 1938
- Box 35 of 35                    Alpha Xi Sigma, April 17, 1940
- Box 35 of 35                    Phi Kappa Phi, December 5, 1940
- Box 35 of 35                    Syracuse University, Bachelor of Science degree, June 2, 1941, see  
Oversize
- Box 35 of 35                    Texas A & M College, Master of Science degree, January 22, 1943, see  
Oversize
- Box 35 of 35                    Phi Kappa Phi, July 29, 1949
- Box 35 of 35                    Oklahoma A & M College, Ph.D. degree, August 2, 1949
- Box 35 of 35                    The Wildlife Society, March 5, 1961
- Box 35 of 35                    American Association for the Advancement of Science, March 1, 1963
- Box 35 of 35                    The Zoological Society of Korea, September 17, 1966
- Box 35 of 35                    Encyclopedia Britannica (undated)

*[Return to Table of Contents](#)*

## Series 13: CHARTS, DIAGRAMS, BLUEPRINTS, AND MAPPINGS.

### Box 35

- Box 35 of 35 Elk Census and Vegetation Study
- Box 35 of 35 Kob: Distances from TGs 3, 6, and 7
- Box 35 of 35 Kob: Herding Areas

### Oversize

- Oversize Blueprints (2) of deer area, NZP, 1972
- Oversize M. S. degree - Texas A & M College, 1943
- Oversize Maps of Uganda kob territorial grounds, with legends (unidentified) a-f
- Oversize Charts - kob: "Days on territory per visit vs days on and off territory per visit;" "Monitoring of TGs," January 1963-March 1963
- Oversize Photograph: 17th North American Wildlife Conference
- Oversize B.S. degree: Syracuse University, 1941

*[Return to Table of Contents](#)*