



Smithsonian Institution Archives

**William F. Foshag Papers, 1923-1965 and undated**

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# Table of Contents

Collection Overview .....	1
Administrative Information .....	1
Historical Note.....	1
Introduction.....	1
Descriptive Entry.....	2
Names and Subjects .....	2
Container Listing .....	3
Series 1: GENERAL CORRESPONDENCE, 1923, 1942-1965. ARRANGED ALPHABETICALLY.....	3
Series 2: PHOTOGRAPHS OF MEXICAN FIELD TRIPS, 1926-1927, 1929, 1931, 1934.....	11
Series 3: FIELD NOTES ON PARÍCUTIN VOLCANO, 1943-1952.....	12
Series 4: PHOTOGRAPHS, SLIDES, AND GLASS PLATE NEGATIVES OF PARÍCUTIN VOLCANO, 1943-1955 AND UNDATED.....	13
Series 5: MANUSCRIPTS, REPORTS, REPRINTS AND PUBLICATIONS ON PARÍCUTIN VOLCANO, 1943-1954 AND UNDATED.....	19
Series 6: RESEARCH NOTES ON PARÍCUTIN VOLCANO, 1946-1950 AND UNDATED.....	22
Series 7: MAPS OF MEXICO.....	24
Series 8: COPY NEGATIVES.....	25

## Collection Overview

<b>Repository:</b>	Smithsonian Institution Archives, Washington, D.C., <a href="mailto:osiaref@si.edu">osiaref@si.edu</a>
<b>Title:</b>	William F. Foshag Papers
<b>Identifier:</b>	Record Unit 7281
<b>Date:</b>	1923-1965 and undated
<b>Extent:</b>	8.59 cu. ft. (14 document boxes) (1 16x20 box) (1 3x5 box) (2 5x8 boxes) (1 oversize folder)
<b>Creator::</b>	Foshag, William F. (William Frederick), 1894-1956
<b>Language:</b>	Language of Materials: English

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## Administrative Information

### Preferred Citation

Smithsonian Institution Archives, Record Unit 7281, William F. Foshag Papers

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## Historical Note

William F. Foshag (1894-1956) joined the United States National Museum's Division of Mineralogy and Petrology as an assistant curator in 1919. From 1929 to 1941, he served as curator of the Division of Physical and Chemical Geology (Systematic and Applied) and from 1929 to 1948 was also curator of the Division of Mineralogy and Petrology. From 1948 to 1956, Foshag was head curator of the Department of Geology and acting curator of the Division of Mineralogy and Petrology.

Foshag's research was primarily devoted to the study of the geology and mineralogy of Mexico. Between 1926 and 1941, Foshag made several collecting trips to Mexico under the auspices of the Smithsonian's Roebling Fund. While serving as a representative of the United States Geological Survey in its cooperative work with the Mexican government, Foshag was able to study the eruption of the Parícutin Volcano in 1943. He made subsequent visits to Parícutin in 1944 and 1945 to observe the volcano. In 1946, he went to Japan for the United States government to supervise the grading, classifying, and appraising of diamonds captured from the Japanese during World War II. In 1949, Foshag was commissioned by the Guatemalan government to survey ancient jade objects from Central America.

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## Introduction

This finding aid was digitized with funds generously provided by the Smithsonian Institution Women's Committee.

## Descriptive Entry

This collection consists mostly of materials documenting Foshag's research on Parícutin Volcano. Included are field notes recorded by Foshag, as well as notes and observations made by Jenaro Gonzalez-Reyna and Celedonia Gutiérrez; photographs, color slides, and glass plate negatives documenting the birth and subsequent activity of the volcano; research notes mostly concerning the analysis of lava and other materials erupted from Parícutin; manuscripts, reports, reprints, and publications concerning Parícutin and volcanology; and maps of Mexico, particularly the Parícutin region. Also included in the collection is general correspondence of Foshag, 1923, 1942-1956, including letters concerning his study of Parícutin Volcano, his survey of Central American jade objects, and photographs taken on several of Foshag's mineral collecting trips to Mexico, 1926-1934.

Foshag transferred a collection of 151 photographic prints and corresponding negatives from his study of Parícutin Volcano to the National Archives in 1951 (NARS Accession Inventory No. 451-111).

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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:

Geology  
Mineralogy

Types of Materials:

Black-and-white photographs  
Field notes  
Manuscripts  
Maps

Names:

Foshag, William F. (William Frederick), 1894-1956  
Geological Survey (U.S.)  
Gonzalez-Reyna, Jenaro, 1905-  
Gutiérrez, Celedonio, 1908-  
John A. Roebling Solar Research Fund  
United States National Museum. Department of Geology  
United States National Museum. Division of Mineralogy and Petrology  
United States National Museum. Division of Physical and Chemical Geology (Systematic and Applied)

Geographic Names:

Parícutin (Volcano)

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## Container Listing

### Series 1: GENERAL CORRESPONDENCE, 1923, 1942-1965. ARRANGED ALPHABETICALLY.

This series consists of incoming and outgoing correspondence of William F. Foshag, primarily during the years he served as head curator of the Department of Geology, United States National Museum (USNM). The correspondence concerns the identification and analysis of gems and minerals; Foshag's study of the Parícutin Volcano; his survey of Guatemalan jade objects; scientific societies and conferences; and the preparation of manuscripts for publication. Correspondence post-dating Foshag's death in 1956 is mostly letters of sympathy written to the Department of Geology, USNM.

#### Box 1

Box 1 of 18	Folder 1 Allen, Robert D., 1954-1955
Box 1 of 18	Folder 2 American Chemical Society, 1950-1951
Box 1 of 18	Folder 3 American Gem and Pearl Company, 1949, 1954
Box 1 of 18	Folder 4 American Gem Society, 1949-1954
Box 1 of 18	Folder 5 American Geological Institute, 1949, 1956
Box 1 of 18	Folder 6 American Geophysical Union, 1949, 1955-1956
Box 1 of 18	Folder 7 <i>American Mineralogist</i> , 1949, 1953-1956
Box 1 of 18	Folder 8 American Museum of Natural History, 1948-1949, 1953-1954
Box 1 of 18	Folder 9 American Potash and Chemical Corporation, 1949
Box 1 of 18	Folder 10 American University, 1949-1950, 1953
Box 1 of 18	Folder 11 Andreatta, Prof. Ciro, 1951-1954
Box 1 of 18	Folder 12 Arellano, Alberto, 1949-1953
Box 1 of 18	Folder 13 Australian Museum, 1949-1952
Box 1 of 18	Folder 14 Austria Geologisches Bundesanstalt, 1951
Box 1 of 18	Folder 15 "A" misc., 1949-1956
Box 1 of 18	Folder 16 Bandy, Mark C., 1949-1956
Box 1 of 18	Folder 17 Barber, Raymond J., 1951-1955
Box 1 of 18	Folder 18 Barron, Elbert M., 1950-1956

Box 1 of 18 Folder 19 Barry, John, 1952-1955

Box 1 of 18 Folder 20 Berger, Anton, 1951-1956

Box 1 of 18 Folder 21 Berlin, Heinrich, 1952-1954

Box 1 of 18 Folder 22 Bideaux, Richard A., 1952-1955

Box 1 of 18 Folder 23 Bliss, Robert Woods, 1948-1956

Box 1 of 18 Folder 24 Borhegyi, Stephan F., 1950-1955

Box 1 of 18 Folder 25 British Museum (Natural History), 1949-1953

Box 1 of 18 Folder 26 Brown, J. J., 1949-1950

Box 1 of 18 Folder 27 Brush Development Laboratories Co., 1948, 1953

Box 1 of 18 Folder 28 Burr, C. Fred, 1950-1954

Box 1 of 18 Folder 29 "B" misc., 1951-1956

Box 1 of 18 Folder 30 Caplan, Allan, 1948-1951

Box 1 of 18 Folder 31 Claringbull, G. F., 1950-1955

Box 1 of 18 Folder 32 Colburn, Burnham S., 1955

Box 1 of 18 Folder 33 Coleman, Charles, 1951-1952

Box 1 of 18 Folder 34 Common Ground (1951) Ltd., 1954-1955

Box 1 of 18 Folder 35 Corry, Andrew V., 1950-1952

Box 1 of 18 Folder 36 Cosmos Club, 1952-1955

Box 1 of 18 Folder 37 Cousen, Thomas W., 1953-1955

Box 1 of 18 Folder 38 Cranbrook Institute, 1949, 1954-1955

Box 1 of 18 Folder 39 Cushman Collection, 1949-1950

Box 1 of 18 Folder 40 "C" misc., 1951-1956

Box 2

Box 2 of 18 Folder 1 D'Ascenzo, Nicola G., 1949-1955

Box 2 of 18 Folder 2 de Terra, Helmut, 1950-1954

Box 2 of 18 Folder 3 de Vuhena, E., 1952

Box 2 of 18	Folder 4 Dickinson College, 1949-1950
Box 2 of 18	Folder 5 Duhovnik, Joze M., 1951-1954
Box 2 of 18	Folder 6 DuPont, James M., 1954-1956
Box 2 of 18	Folder 7 "D" misc., 1949-1956
Box 2 of 18	Folder 8 Easby, Dudley T., Jr., 1955-1956
Box 2 of 18	Folder 9 Eastern Federation of Mineralogical and Lapidary Societies, 1953-1955
Box 2 of 18	Folder 10 Eldot, Herman, 1949-1954
Box 2 of 18	Folder 11 Emory University, 1950-1956
Box 2 of 18	Folder 12 Encyclopedia Britannica, 1954-1955
Box 2 of 18	Folder 13 "E" misc., 1949-1956
Box 2 of 18	Folder 14 Fischer, Walther, 1949-1956
Box 2 of 18	Folder 15 Fisher, Otto O., 1948-1956
Box 2 of 18	Folder 16 Flagg, Arthur, 1950-1956
Box 2 of 18	Folder 17 Flores, Teodoro, 1949-1955
Box 2 of 18	Folder 18 Ford, Hugh A., 1948-1955
Box 2 of 18	Folder 19 Fries, Carl, Jr., 1948-1952
Box 2 of 18	Folder 20 Fryxell, Fritiof M., 1954-1956
Box 2 of 18	Folder 21 Fuller, Richard E., 1950
Box 2 of 18	Folder 22 "F" misc., 1949-1956
Box 2 of 18	Folder 23 Gemological Institute of America, 1948-1954
Box 2 of 18	Folder 24 Gems and Minerals Magazine, 1953
Box 2 of 18	Folder 25 General Electric Company, 1954-1956
Box 2 of 18	Folder 26 Geological Society of America, 1948-1955
Box 2 of 18	Folder 27 Geophysical Laboratory, 1949-1950
Box 2 of 18	Folder 28 Geophysical Magazine (London), 1953-1954
Box 2 of 18	Folder 29 Gonzalez, Enrique M., 1955

Box 2 of 18 Folder 30 Gonzalez, Jenaro, 1949-1956  
Box 2 of 18 Folder 31 Graton, Louis C., 1948-1956  
Box 2 of 18 Folder 32 Guatemala Research, 1948-1954  
Box 2 of 18 Folder 33 Guild, William, 1952-1956  
Box 2 of 18 Folder 34 Gutiérrez, Celedonio, 1948-1955  
Box 2 of 18 Folder 35 Gutiérrez, Celedonio (manuscript), undated  
Box 2 of 18 Folder 36 "G" misc., 1951-1956  
Box 2 of 18 Folder 37 Hansen, Oskar J. W. , 1949-1955  
Box 2 of 18 Folder 38 Hardinge, C. E., 1953-1957  
Box 2 of 18 Folder 39 Healy, James, 1950-1953  
Box 2 of 18 Folder 40 Hermann, Felix, 1949-1952  
Box 2 of 18 Folder 41 Hix's Strange as It Seems, 1949  
Box 2 of 18 Folder 42 Hoffman, Robert D., 1952-1953  
Box 2 of 18 Folder 43 Holmes, Ralph J., 1951-1955  
Box 2 of 18 Folder 44 "H" misc., 1949-1956

Box 3

Box 3 of 18 Folder 1 Ingram, W. Frank, 1950-1955  
Box 3 of 18 Folder 2 International Commission on Meteorites, 1948-1953  
Box 3 of 18 Folder 3 International Geological Congress XX, 1955-1956  
Box 3 of 18 Folder 4 Inter-Ocean Trade Company, 1951-1955  
Box 3 of 18 Folder 5 "I" misc., 1950-1956  
Box 3 of 18 Folder 6 Jensen, David E., 1950-1955  
Box 3 of 18 Folder 7 Johnston, William D., Jr., 1950-1953  
Box 3 of 18 Folder 8 Jones, Grover C., 1954-1956  
Box 3 of 18 Folder 9 Jones, Waldo H., 1953-1954  
Box 3 of 18 Folder 10 Jones, Warren, 1953-1955



Box 3 of 18	Folder 11 Joseph, Mildred E., 1954-1956
Box 3 of 18	Folder 12 "J" misc., 1950-1956
Box 3 of 18	Folder 13 Kalousek, George L., 1952-1955
Box 3 of 18	Folder 14 Kennedy, George C., 1954-1956
Box 3 of 18	Folder 15 Kidder, Alfred Vincent, 1950-1955
Box 3 of 18	Folder 16 King, Lansford, 1950-1954
Box 3 of 18	Folder 17 Kobayashi, Teiichi, 1951-1955
Box 3 of 18	Folder 18 Kouvo, Olavi, 1953-1955
Box 3 of 18	Folder 19 Kraft, James L., 1951-1952
Box 3 of 18	Folder 20 Kraus, Edward H., 1950-1955
Box 3 of 18	Folder 21 Kulp, J. Laurence, 1955
Box 3 of 18	Folder 22 Kume, Takeo, 1948-1951
Box 3 of 18	Folder 23 Kuno, Hisashi, 1948-1955
Box 3 of 18	Folder 24 "K" misc., 1949-1956
Box 3 of 18	Folder 25 Lane, Boodle, 1950-1953
Box 3 of 18	Folder 26 Lapham, Davis M., 1953-1956
Box 3 of 18	Folder 27 Laughlin, Alexander William, 1953
Box 3 of 18	Folder 28 Leslie, Robert E., 1954-1955
Box 3 of 18	Folder 29 "L" misc., 1949-1956
Box 3 of 18	Folder 30 "Mc" misc., 1953-1956
Box 3 of 18	Folder 31 Maas, Alberto E., 1952-1955
Box 3 of 18	Folder 32 Macdonald, Gordon A., 1951-1956
Box 3 of 18	Folder 33 Matsumoto, Tatsuro, 1955
Box 3 of 18	Folder 34 Mayboeck, Franz, 1949-1953
Box 3 of 18	Folder 35 Mayers, Dan E., 1948-1951
Box 3 of 18	Folder 36 Meen, Victor B., 1950-1955

Box 3 of 18 Folder 37 Meteoritical Society, 1953, 1957  
Box 3 of 18 Folder 38 Mexico Institute Nacional Recursos Minerales, 1951-1953  
Box 3 of 18 Folder 39 Mexico University Centennial IV, 1951  
Box 3 of 18 Folder 40 Meyerhoff, Howard Augustus, 1950-1951  
Box 3 of 18 Folder 41 Michel, Herman, 1951-1952  
Box 3 of 18 Folder 42 Mineralogical Society of America, 1948-1956  
Box 3 of 18 Folder 43 Minikami, Takeshi, 1949-1956  
Box 3 of 18 Folder 44 "M" misc., 1948-1958

Box 4

Box 4 of 18 Folder 1 National Geographic Magazine, 1950-1956  
Box 4 of 18 Folder 2 National Research Council, 1949-1950  
Box 4 of 18 Folder 3 Natural History Magazine, 1953  
Box 4 of 18 Folder 4 Nelson, Elmer R., Jr., 1951-1955  
Box 4 of 18 Folder 5 "N" misc., 1950-1956  
Box 4 of 18 Folder 6 O'Daniel, H., 1954-1955  
Box 4 of 18 Folder 7 "O" misc., 1950-1956  
Box 4 of 18 Folder 8 Pabst, Adolf, 1951-1952  
Box 4 of 18 Folder 9 Pacific Science Congress VII, 1948-1949  
Box 4 of 18 Folder 10 Parícutin Volcano, 1943-1965  
Box 4 of 18 Folder 11 Parícutin Volcano - Film and Photos, 1949-1956  
Box 4 of 18 Folder 12 Perry, Stuart H., 1951-1953  
Box 4 of 18 Folder 13 Pfannenstiel, Max, 1954-1955  
Box 4 of 18 Folder 14 Phelps Dodge Corporation, 1953  
Box 4 of 18 Folder 15 Pitts, William B., 1948-1956  
Box 4 of 18 Folder 16 Pough, Frederick H., 1948-1955  
Box 4 of 18 Folder 17 Powers, Howard A., 1949-1951

Box 4 of 18 Folder 18 "P" misc., 1950-1956

Box 4 of 18 Folder 19 "Q" misc., 1955

Box 4 of 18 Folder 20 Rapp, Floyd A., 1948-1954

Box 4 of 18 Folder 21 Redington, C. Richard, 1952-1956

Box 4 of 18 Folder 22 Renfro Collection, 1949

Box 4 of 18 Folder 23 Royal Ontario Museum of Geology, 1948-1950

Box 4 of 18 Folder 24 "R" misc., 1949-1956

Box 4 of 18 Folder 25 Sahama, Th. G., 1949

Box 4 of 18 Folder 26 Sakurai, Kin-ich, 1948-1956

Box 4 of 18 Folder 27 Santillan, Manuel, 1953-1956

Box 4 of 18 Folder 28 Schmitter, Eduardo, 1949-1953

Box 4 of 18 Folder 29 Schweizerbart'sche Verlagsbuchhandlung, 1952-1954

Box 4 of 18 Folder 30 Science Clubs of America, 1955

Box 4 of 18 Folder 31 Seifert, H., 1953-1954

Box 4 of 18 Folder 32 Shipley, Robert, 1949-1952

Box 4 of 18 Folder 33 Sinkankas, John, 1949-1956

Box 4 of 18 Folder 34 Skinner, George D., 1949-1953

Box 4 of 18 Folder 35 Solle, G., 1953

Box 4 of 18 Folder 36 Soper, Ellis Clarke, 1953-1955

Box 4 of 18 Folder 37 Spence, Hugh S., 1949-1952

Box 4 of 18 Folder 38 Staats, Fred, 1950-1952

Box 4 of 18 Folder 39 Stevens, J. A., 1949-1950

Box 4 of 18 Folder 40 Sudo, Toshio, 1949-1951

Box 4 of 18 Folder 41 Sutti, Martin, 1952-1953

Box 4 of 18 Folder 42 "S" misc., 1952-1956

Box 5

Box 5 of 18	Folder 1 Taylor, James A., 1951-1953
Box 5 of 18	Folder 2 Termer, Franz, 1950-1956
Box 5 of 18	Folder 3 "T" misc., 1951-1956
Box 5 of 18	Folder 4 United States Geological Survey, 1949-1956
Box 5 of 18	Folder 5 United States Geological Survey - Collections, 1952-1954
Box 5 of 18	Folder 6 "U" misc., 1950-1956
Box 5 of 18	Folder 7 Verlag Gustao Feller-Nottuln, 1953
Box 5 of 18	Folder 8 Vienna Naturhistorisches Museum, 1952-1953
Box 5 of 18	Folder 9 Vonsen, Magnus, 1949-1954
Box 5 of 18	Folder 10 "V" misc., 1949-1956
Box 5 of 18	Folder 11 Ward's Natural Science Establishment, 1948-1954
Box 5 of 18	Folder 12 Washington Academy of Sciences Journal, 1923, 1950-1955
Box 5 of 18	Folder 13 Watambe, Takeo, 1949-1955
Box 5 of 18	Folder 14 Wells, Francis G., 1949-1951
Box 5 of 18	Folder 15 Wheeler, Harry Edgar, 1952-1956
Box 5 of 18	Folder 16 Wilcox, Ray E., 1949-1956
Box 5 of 18	Folder 17 Wild, Georg O., 1949-1956
Box 5 of 18	Folder 18 "W" misc., 1942, 1949-1956
Box 5 of 18	Folder 19 Yagi, Kenzo, 1953-1954
Box 5 of 18	Folder 20 Zak, Lubor, 1955-1956
Box 5 of 18	Folder 21 "X-Y-Z" misc., 1952-1956

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

## Series 2: PHOTOGRAPHS OF MEXICAN FIELD TRIPS, 1926-1927, 1929, 1931, 1934.

This series consists of an album of photographs documenting several of William F. Foshag's trips to Mexico to collect mineral specimens for the USNM. Included are photographs of Mexican cities and villages; Mexican people; mining sites; the field parties, including several of Foshag; and specimens collected. Most of the photographs are described, but undated.

### Box 5

Box 5 of 18

Folder 22 Photographs of Mexican field trips, 1926-1927, 1929, 1931, 1934

[Digital Content: Photograph album of William F. Foshag's Mexican field trips, 1926-1927, 1929, 1931, and 1934.](#)

[Image\(s\): Merle Crisler Foshag, wife of William F. Foshag, Curator in the Department of Geology and their son, William F. Foshag III \(?\). In Tepoztlán, Mexico. \(Image no. SIA2010-3494\)](#)

[Image\(s\): Merle Crisler Foshag and her husband William F. Foshag, Curator in the U.S. National Museum's Department of Geology. The two are standing amid flowers while on Foshag's scientific expedition to Tepoztlán, Mexico. \(Image no. SIA2010-3495\)](#)

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

## Series 3: FIELD NOTES ON PARÍCUTIN VOLCANO, 1943-1952.

This series consists primarily of field notes concerning the eruption of Parícutin Volcano recorded by William F. Foshag. Also included are field notes on the volcano maintained by Jenaro Gonzalez and Celedonia Gutiérrez. The latter notes are written in Spanish.

### Box 6

- Box 6 of 18                      Folder 1 Foshag, William F. Field notes, May 21-August 1943. Typed copy.  
[Digital Content: Two sets of typed notes documenting William F. Foshag's fieldwork, May 21-August 1943, in Mexico at Parícutin Volcano.](#)
- Box 6 of 18                      Folder 2 Foshag, William F. Field notes, March 21-July 8, 1944.  
[Digital Content: Field notes documenting William F. Foshag's work, March 21-July 8, 1944 at Parícutin Volcano in Mexico.](#)
- Box 6 of 18                      Folder 3 Foshag, William F. Field notes, November 28, 1943-December 8, 1944. Includes pencil drawings of Parícutin by Foshag.  
[Digital Content: Notebook documenting William F. Foshag's work at Parícutin Volcano and Mesa de Los Hornitos in Mexico, November 28, 1943-December 8, 1944.](#)
- Box 6 of 18                      Folder 4 Foshag, William F. Field notes, January 16-October 27, 1945.  
[Digital Content: Notebook describing work completed by William F. Foshag at Parícutin and Mesa de los Hornitos in Mexico, September 16, 1943-October 27, 1945.](#)
- Box 6 of 18                      Folder 5 Gonzalez-Reyna, Jenaro. Field notes, July 1943-August 1945. Typed copy, in Spanish.  
[Digital Content: Notebook documenting Jenaro Gonzalez-Reyna's field work with William F. Forshag on multiple trips to Parícutin Volcano in Mexico, July 1943-August 1945.](#)
- Box 6 of 18                      Folders 6-7 Gutiérrez, Celedonio. "Field notes and observations on the activity of Parícutin Volcano," 1943, 1945-1949, 1951-1952.  
[Digital Content: "Field notes and observations on the activity of Parícutin Volcano," by Celedonio Gutiérrez, 1943, 1945-1949, 1951-1952. \(Folder 6\)](#)  
[Digital Content: "Field notes and observations on the activity of Parícutin Volcano," by Celedonio Gutiérrez, 1943, 1945-1949, 1951-1952. \(Folder 7\)](#)

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

## Series 4: PHOTOGRAPHS, SLIDES, AND GLASS PLATE NEGATIVES OF PARÍCUTIN VOLCANO, 1943-1955 AND UNDATED.

This series provides extensive photographic documentation of the birth and subsequent activity of the Mexican volcano, Parícutin. Included are photographs taken by Foshag during his field work at Parícutin, as well as photographs taken by others and collected by Foshag. Most of the photographs are described and dated. Included are photographs of the volcano in eruption; pictures documenting the effect of Parícutin on local villages and people; aerial photographs of the volcano; and photographs of scientists, including Foshag, conducting field research at Parícutin.

### Box 7

Box 7 of 18

Folders 1-8 Foshag, William F. Photographs of Parícutin Volcano, no. F2-F171, 1943-1944.

[Digital Content: Black and white photographs taken by William F. Foshag of Parícutin Volcano, 1943-1944. Includes image numbers F2-F14.](#)

[Digital Content: Black and white photographs taken by William F. Foshag of Parícutin Volcano, May 27-July 31, 1943. Includes image numbers F15-F33c.](#)

[Digital Content: Black and white photographs taken by William F. Foshag of Parícutin Volcano, June 10-14, 1943. Includes image numbers F33d-F49.](#)

[Digital Content: Black and white photographs taken by William F. Foshag of Parícutin Volcano, June 12-19, 1943. Includes image numbers F51-F71](#)

[Digital Content: Black and white photographs taken by William F. Foshag of Parícutin Volcano, July 24-August 3, 1943. Includes image numbers F72-F97K.](#)

[Digital Content: Black and white photographs taken by William F. Foshag of Parícutin Volcano, June 12-July 31, 1943. Includes image numbers F98A-F106A.](#)

[Digital Content: Black and white photographs taken by William F. Foshag of Parícutin Volcano, August 1-5, 1943. Includes image numbers F106B-F120.](#)

[Digital Content: Black and white photographs taken by William F. Foshag of Parícutin Volcano, July 29, 1943-March 2, 1944. Includes image numbers F121-F171.](#)

[Image\(s\): Fumarole of Parícutin \(Image no. SIA2009-0856\)](#)

[Image\(s\): Image of Parícutin, March 24, 1943, Photo A \(Image no. SIA2009-0857\)](#)

[Image\(s\): Image of Parícutin, March 24, 1943, Photo B \(Image no. SIA2009-0858\)](#)

[Image\(s\): Lava eruptions of Parícutin at night, June 9, 1943 \(Image no. SIA2009-0859\)](#)

[Image\(s\): Lava eruptions of Parícutin at night, July 29, 1943 \(Image no. SIA2009-0860\)](#)

[Image\(s\): Cabin on the north east side of Parícutin, June 12, 1943 \(Image no. SIA2009-0861\)](#)

[Image\(s\): Image of Parícutin volcano, May 24, 1943 \(Image no. SIA2009-0862\)](#)

[Image\(s\): Church at Parícutin, May 27, 1943 \(Image no. SIA2009-0863\)](#)

[Image\(s\): Church at Parícutin, July 31, 1943 \(Image no. SIA2009-0864\)](#)

Image(s): Image of Cross near Parícutin, May 27, 1943 (Image no. SIA2009-0865)  
Image(s): Parícutin's Crater, July 31, 1945 (Image no. SIA2009-0866)  
Image(s): A group of men near Parícutin, June 14, 1943 (Image no. SIA2009-0867)  
Image(s): Parícutin, June 14, 1943 (Image no. SIA2009-0868)  
Image(s): Two men near Parícutin, June 14, 1943 (Image no. SIA2009-0869)  
Image(s): Parícutin from the north east, June 13, 1943 (Image no. SIA2009-0870)  
Image(s): Parícutin, north east side, June 18, 1943 (Image no. SIA2009-0871)  
Image(s): Lake near Parícutin, August 1, 1943 (Image no. SIA2009-0872)  
Image(s): House near Parícutin, July 31, 1943 (Image no. SIA2009-0873)  
Image(s): Lava flow from Parícutin, July 31, 1943 (Image no. SIA2009-0874)  
Image(s): Parícutin Volcano from the east, December 5, 1943 (Image no. SIA2009-0875)  
Image(s): Front of flow of Parícutin Volcano from January and February 1944 (Image no. SIA2009-0876)  
Image(s): Parícutin Volcano, November 28, 1943 (Image no. SIA2009-0877)  
Image(s): Parícutin Volcano, March 2, 1944 (Image no. SIA2009-0878)  
Image(s): Parícutin Volcano, September 17, 1943 (Image no. SIA2009-0879)  
Image(s): Parícutin Volcano, January 9, 1944 (Image no. SIA2009-0880)  
Image(s): Parícutin Volcano, March 2, 1944, "Return to Normal Column. Gray Steam." (Image no. SIA2009-0881)

#### Box 8

#### Box 8 of 18

Folders 1-6 Foshag, William F. Photographs of Parícutin Volcano, no. F172-F319, 1944-1945.

Digital Content: Black and white photographs taken by William F. Foshag of Parícutin Volcano, March 2-July 7, 1944. Includes image numbers F172-F210.

Digital Content: Black and white photographs taken by William F. Foshag of Parícutin Volcano, June 20-22, 1944. Includes image numbers F211A-F228.

Digital Content: Black and white photographs taken by William F. Foshag of Parícutin Volcano, July 7-August 17, 1944. Includes image numbers F229-F257.

Digital Content: Black and white photographs taken by William F. Foshag of Parícutin Volcano, November 23, 1944-January 23, 1945. Includes image numbers F257C-F270W.

Digital Content: Black and white photographs taken by William F. Foshag of Parícutin Volcano, November 29, 1944-May 27, 1945. Includes image numbers F271-F285F.

Digital Content: Black and white photographs taken by William F. Foshag of Parícutin Volcano, June-July 1943, May 27-July 31, 1945, and April 1950. Includes image numbers F285g-F319.

Image(s): Image of Parícutin volcano developing taken on March 3, 1944 (Image no. SIA2009-0988)



Image(s): Image of Parícutin volcano developing taken on May 24, 1944 (Image no. SIA2009-0989)

Image(s): Man standing near Parícutin volcano, March 22, 1944 (Image no. SIA2009-0990)

Image(s): Village near the base of the Parícutin volcano, June 1944 (Image no. SIA2009-0991)

Image(s): Parícutin, afternoon, July 1, 1944 (Image no. SIA2009-0992)

Image(s): Image of Parícutin volcano developing taken on November 26, 1944 (Image no. SIA2009-0993)

Image(s): Church on Parangaricutiro, Parícutin, August 18, 1944 (Image no. SIA2009-0994)

Image(s): Image of Parícutin volcano developing taken on August 16, 1944 (Image no. SIA2009-0995)

Image(s): Image of Parícutin volcano developing taken on July 8, 1944 (Image no. SIA2009-0996)

Image(s): Panorama of Parícutin, November 26, 1944 (Image no. SIA2009-0997)

Image(s): Image of Parícutin volcano developing taken on December 3, 1944 (Image no. SIA2009-0998)

Image(s): Image of Parícutin volcano developing taken on December 1, 1944 (Image no. SIA2009-0999)

Image(s): Parícutin from Jaratiro, November 30, 1944 (Image no. SIA2009-1001)

Image(s): Parícutin, November 29, 1944; Aguan flow (dark) on San Juan flow (Image no. SIA2009-1002)

Image(s): Man sitting on a rock near Parícutin volcano, January 24, 1945 (Image no. SIA2009-1003)

Image(s): Man sitting on a rock near Parícutin volcano, January 24, 1945 (Image no. SIA2009-1004)

Image(s): Parícutin volcano, January 25, 1945 (Image no. SIA2009-1005)

Image(s): Parícutin, January 24, 1945, close up view (Image no. SIA2009-1006)

Image(s): Parícutin volcano, December 5, 1944 (Image no. SIA2009-1007)

Image(s): Parícutin, heavy ash flow over Guanajuato, January 24, 1945 (Image no. SIA2009-1008)

Image(s): Infrared image of Parícutin volcano, May 28, 1945 (Image no. SIA2009-1009)

Image(s): Parícutin volcano, the flow from the Lornitos area, July 4, 1945 (Image no. SIA2009-1010)

Image(s): Parícutin, heavy ash flow over Guanajuato, July 5, 1945 (Image no. SIA2009-1011)

Image(s): Image of the Parícutin volcano's crater taken on July 31, 1945 (Image no. SIA2009-1012)

Image(s): Felipe Cuara-Amezcuca (Image no. SIA2009-1013)

Image(s): Parícutin volcano, July 26, 1945 (Image no. SIA2009-1014)

Image(s): Parícutin, heavy ash column but raising rather lightly, frequently drifting down slope, July 4, 1945 (Image no. SIA2009-1015)

- Box 8 of 18 Folder 7 Andresen, Gerardo. Photographs of Parícutin Volcano, undated.  
Digital Content: Black and white photographs depict San Juan, Mexico being consumed by the lava flows of Parícutin Volcano, during its period of eruption, 1943-1952. Photographs were taken by Gerardo Anderson, and are undated.
- Box 8 of 18 Folder 8 Brehme, Arno. Photographs of Parícutin Volcano, April 1943.  
Digital Content: Black and white photographs and negatives taken by Arno Brehme of Parícutin Volcano, April 1943-March 1944.
- Box 8 of 18 Folder 9 Castro, Honorato Gonzalez. Photographs of Parícutin Volcano, 1944.  
Digital Content: Black and white photographs taken by Honorato Gonzale Castro of Parícutin Volcano, March-December, 1944.
- Box 8 of 18 Folder 10 Fisher, Otto O. Consists mostly of aerial photographs of Parícutin Volcano, December 1944. Also includes a photograph of William F. Foshag in the field at Parícutin, November 27, 1944.  
Digital Content: Aerial photographs of Parícutin Volcano by Otto O. Fisher, December 1944. Also includes a photograph of William F. Foshag in the field at Parícutin, November 27, 1944.
- Box 8 of 18 Folder 11 Fries, Carl, Jr. Photographs of Parícutin Volcano, 1943-1945.  
Digital Content: Black and white photographs of Parícutin Volcano taken by Carl Fries, Jr., June 23, 1943-July 29, 1945.  
Image(s): Image of house buried by volcanic ash spewed from Parícutin (Volcano) in Mexico, 1945 (Image no. SIA2009-0713)
- Box 8 of 18 Folder 12 Garcia, Rafael. Photographs of Parícutin Volcano, 1943-1944.  
Digital Content: Black and white photographs of Parícutin Volcano taken by Rafael Garcia, 1943-1944.
- Box 9
- Box 9 of 18 Folder 1 Gonzalez, Jenaro. Photographs of Parícutin Volcano, 1944.  
Digital Content: Black and white photographs of Parícutin Volcano taken by Jenaro Gonzalez, January 4-June 22, 1944.
- Box 9 of 18 Folder 2 Graton, Louis C. Photographs of Parícutin Volcano, April 19, 22, 1943.  
Digital Content: Black and white photographs of Parícutin volcano taken by Louis C. Graton, April 19 and 22, 1943.
- Box 9 of 18 Folder 3 Gregory, Audrey F., Photographs of Parícutin Volcano, 1944.  
Image(s): Image of Parícutin volcano developing, taken on November 29, 1944. The caption reads "Taken from Upper Casita." (Image no. SIA2009-0882)
- Box 9 of 18 Folder 4 Gutiérrez, Caledonio. Photographs of Parícutin Volcano, 1947, 1949.

- Box 9 of 18 Folder 5 Gutiérrez, Luis. Photographs of Parícutin Volcano, undated.
- Box 9 of 18 Folder 6 Lawrence, Donald B. Photographs of Parícutin Volcano, December 1943.
- Box 9 of 18 Folder 7 Navarro. Photographs of Parícutin Volcano, 1943-1944.
- Box 9 of 18 Folder 8 Navy, United States. Aerial photographs of Parícutin Volcano, undated.
- Box 9 of 18 Folders 9-10 Ordonez, Ezequiel. Photograph album and miscellaneous photographs of Parícutin Volcano, 1943-1945.  
[Digital Content: Photograph album documenting the first three years of the Parícutin Volcano and its activity, February 24, 1943-March 20, 1945, taken by Ezequiel Ordonez.](#)
- Box 9 of 18 Folder 11 Perez Pena, Adan. Photographs of Parícutin Volcano, 1943, 1945.
- Box 9 of 18 Folder 12 Pfeiffer, Arnold. Photographs of Parícutin Volcano, 1943.
- Box 9 of 18 Folder 13 Richard, Horace G. Photographs of Parícutin Volcano, April 1944.
- Box 9 of 18 Folder 14 Ruesga, Edmundo. Photographs of Parícutin Volcano, 1943.
- Box 9 of 18 Folder 15 Ruiz, Chavez. Photographs of Parícutin Volcano, 1943.

Box 10

- Box 10 of 18 Folder 1 St. Alban, Mary. Photographs of Parícutin Volcano, 1943-1944.
- Box 10 of 18 Folder 2 Trask, Parker. Photographs of Parícutin Volcano, February 28, 1943.
- Box 10 of 18 Folder 3 Termer, Franz. Photographs of Parícutin Volcano, November 1949.
- Box 10 of 18 Folder 4 Waitz, Paul. Photographs of Parícutin Volcano, 1943-1945.
- Box 10 of 18 Folder 5 Zeirer, Frank. Photographs of Parícutin Volcano, 1943-1944.
- Box 10 of 18 Folders 6-7 Aerial photographs of Parícutin Volcano, no. 1-132. Taken at approximately 15,000 feet.  
[Digital Content: Aerial photographs documenting the terrain around Parícutin Volcano in Mexico. Images were taken in May 26, 1945 at approximately 15,000 feet. Includes numbers 1-65.](#)  
[Digital Content: Aerial photographs documenting the terrain around Parícutin Volcano in Mexico. Images were taken May 26, 1945 at approximately 15,000 feet. Includes numbers 66-132.](#)
- Box 10 of 18 Folders 8-10 Miscellaneous photographs of Parícutin Volcano, 1943.

Box 11

Box 11 of 18                      Folders 1-6 Miscellaneous photographs of Parícutin Volcano, 1944-1945 and undated.

[Image\(s\): William F. Foshag \(Image no. SIA2009-1508\)](#)

Box 11 of 18                      Folder 7 Miscellaneous photographs of Mexico, undated.

[Image\(s\): Dionicio Pulido \(Image no. SIA2009-1544\)](#)

Box 12

Box 12 of 18                      Color slides and glass plate negatives of Parícutin Volcano, undated.

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

## Series 5: MANUSCRIPTS, REPORTS, REPRINTS AND PUBLICATIONS ON PARÍCUTIN VOLCANO, 1943-1954 AND UNDATED.

This series consists of manuscripts, reports, reprints, and publications on Parícutin Volcano. Much of the material is written in Spanish.

### Box 13

- Box 13 of 18 Folder 1 Barnes, Virgil E. and Romberg, Frederick. "Observations of Relative Gravity at Parícutin Volcano." Reprint from Bulletin of the Geological Society of America, vol. 59, pp. 1019-1026, 1948.
- Box 13 of 18 Folder 2 Berbeyer, Rafael Molina. "Angunas Observaciones Geoquimicas y Fisico-Quimicas en el Volcan Parícutin," 1946. Typed manuscript in Spanish.
- Box 13 of 18 Folder 3 Covarrubias, Luis Flores. "Interpretaciones. Geneticas del Volcan Parícutin a la Luz de la Sismologia." Folleto No. 7, Sociedad Geologica Mexicana, 1945. The report is written in Spanish.
- Box 13 of 18 Folder 4 Foshag, William F. and Henderson, Edward P. "Primary Sublimates at Parícutin Volcano." Reprint from Transactions of the American Geophysical Union, vol. 27, no. 5, 1946.
- Box 13 of 18 Folder 5 Foshag, William F., Handwritten draft of his review of "Volumes and weights of pyroclastic material, lava, and water erupted by Parícutin Volcano, Michocacan, Mexico," by Carl Fries, Jr., 1953.
- Box 13 of 18 Folder 6 Fries, Carl, Jr., and Gutiérrez, Celedonio. "Activity of Parícutin Volcano from July 1 to December 31, 1949." Reprint from Transactions of the American Geophysical Union, vol. 31, pp. 732-740, 1950.
- Box 13 of 18 Folder 7 Fries, Carl, Jr. and Gutiérrez, Celedonio. "Activity of Parícutin Volcano from January 1 to June 30, 1950." Reprint from Transactions of the American Geophysical Union, vol. 32, pp. 227-230, 1951.
- Box 13 of 18 Folder 8 Gutiérrez, Celedonio. "Notas de Lo Que Fue en San Juan Antes del Volcan." Typed report in Spanish.
- Box 13 of 18 Folder 9 Hatt, Robert T. "Bibliography of Parícutin Volcano." Reprint from Papers of the Michigan Academy of Science, Art's and Letters, Vol. XXXIV, 1948.
- Box 13 of 18 Folder 10 Lawrence, Donald B. "Parícutin: The World's Newest Mountain." Reprint from Mazama, vol. 26, pp. 15-34, 1944.
- Box 13 of 18 Folder 11 Milton, Charles. "Notes on Volcanic Rocks from Parícutin, Mexico." Reprint from *Transactions of the American Geophysical Union*, 1944.
- Box 13 of 18 Folder 12 Ordonez, Ezequiel. "The New Volcano Parícutin." Reprint from *International Intellectual Interchange*, 1943.

- Box 13 of 18 Folder 13 Ordonez, Ezequiel. "El Volcan De Parícutin." *Irrigacion en Mexico*, July-August 1943. Written in Spanish.
- Box 13 of 18 Folder 14 Ordonez, Ezequiel. "El Volcan de Parícutin," 1944.
- Box 13 of 18 Folder 15 Perez Pena, Adan. "Periodo de Actividad del volcan Parícutin; Mich. del 9 al 18 de Junio de 1943." Typed report in Spanish.
- Box 13 of 18 Folder 16 Segerstrom, Kenneth. Monthly report on Parícutin Volcano, July 1946.
- Box 13 of 18 Folder 17 Termer, Franz. "Der Parícutin Vulkan in Michoacan, Mexico," 1952. Written in German.
- Box 13 of 18 Folder 18 Trask, Parker D. "The Mexican Volcano Parícutin," undated. Typed report.
- Box 13 of 18 Folder 19 White, Donald E. "Parícutin's Cyclic Activity." Typed manuscript and reprint from Transactions of the American Geophysical Union, 1944.
- Box 13 of 18 Folder 20 Wilcox, Ray. E. "Activity of Parícutin, December 1945." Typed report.
- Box 13 of 18 Folder 21 Wilcox, Ray E. "Activity of Parícutin Volcano from September 18 to November 30, 1946." Reprint from Transactions of the American Geophysical Union, 1947.
- Box 13 of 18 Folder 22 Wilcox, Ray E. Reports on Activity of Parícutin Volcano, September 1946-June 1947. Also includes notes by Foshag on Wilcox's reports.
- Box 13 of 18 Folder 23 Wilcox, Ray E. "Activity of Parícutin Volcano from December 1, 1946 to March 31, 1947." Reprint from Transactions of the American Geophysical Union, 1947.
- Box 13 of 18 Folder 24 Wilcox, Ray E. and Oropeza, Samuel Shoup. "Activity of Parícutin Volcano from April 1 to November 30, 1947." Reprint from Transactions of the American Geophysical Union, 1948.
- Box 13 of 18 Folder 25 Wilcox, Ray E. and Gutiérrez, Celedonio. "Activity of Parícutin Volcano from April 1 to July 31, 1948." Reprint from Transactions of the American Geophysical Union, 1948.
- Box 13 of 18 Folder 26 Wilcox, Ray E. "Petrology of Parícutin Volcano, Mexico." United States Geological Survey Bulletin 965-C, 1954.
- Box 13 of 18 Folder 27 Williams, Howel. "Volcanoes of the Parícutin Region, Mexico." United States Geological Survey Bulletin 965-B, 1950.
- Box 13 of 18 Folder 28 "Geologia de Tierra Caliente y Parte de la Costa de Michoacan," author unknown and undated. Written in Spanish.

- Box 13 of 18                      Folder 29 Miscellaneous articles concerning Parícutin Volcano, 1943-1952  
and undated.
- Box 13 of 18                      Folder 30 Miscellaneous publications concerning volcanoes.

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

## Series 6: RESEARCH NOTES ON PARÍCUTIN VOLCANO, 1946-1950 AND UNDATED.

This series consists of research notes taken by William F. Foshag during his study of Parícutin Volcano. Most of the notes concern the analysis of lava and other materials erupted from the volcano. Also included are notes made by Foshag during his survey of Central American jade objects (box 14, folder 1).

### Box 14

- |              |                                                                                                                                                                         |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Box 14 of 18 | Folder 1 Notebook containing notes, recorded by Foshag, mostly concerning the analysis of Parícutin lava samples. Also includes notes on Central American jade objects. |
| Box 14 of 18 | Folder 2 Notebook containing notes, recorded by Foshag, concerning mud and salt samples from Parícutin.                                                                 |
| Box 14 of 18 | Folder 3 Ammonia and sal-ammoniac.                                                                                                                                      |
| Box 14 of 18 | Folder 4 Ascensive force.                                                                                                                                               |
| Box 14 of 18 | Folder 5 Ash-lava ratio                                                                                                                                                 |
| Box 14 of 18 | Folder 6 Ash solubility                                                                                                                                                 |
| Box 14 of 18 | Folder 7 Bombs                                                                                                                                                          |
| Box 14 of 18 | Folder 8 Crater                                                                                                                                                         |
| Box 14 of 18 | Folder 9 Eruptions                                                                                                                                                      |
| Box 14 of 18 | Folder 10 Flashing arcs                                                                                                                                                 |
| Box 14 of 18 | Folder 11 Fumaroles                                                                                                                                                     |
| Box 14 of 18 | Folder 12 Gases                                                                                                                                                         |
| Box 14 of 18 | Folder 13 Gases, burning                                                                                                                                                |
| Box 14 of 18 | Folder 14 Geology of Michoacan, Mexico.                                                                                                                                 |
| Box 14 of 18 | Folder 15 Hornitos                                                                                                                                                      |
| Box 14 of 18 | Folder 16 Inclusions                                                                                                                                                    |
| Box 14 of 18 | Folder 17 Laccoliths                                                                                                                                                    |
| Box 14 of 18 | Folder 18 Lavas                                                                                                                                                         |
| Box 14 of 18 | Folder 19 Lava, flows                                                                                                                                                   |
| Box 14 of 18 | Folder 20 Lightning                                                                                                                                                     |



Box 14 of 18	Folder 21 Rainfall
Box 14 of 18	Folder 22 Rock alteration
Box 14 of 18	Folder 23 Secondary sublimates
Box 14 of 18	Folder 24 Sublimates. Includes letter from Charles Milton to Foshag (May 22, 1947) regarding the analysis of rocks from Parícutin.
Box 14 of 18	Folder 25 United States Geological Survey. Analysis of lava and other materials recovered from Parícutin and submitted by Foshag, 1946-1950.
Box 14 of 18	Folder 26 Vapor clouds
Box 14 of 18	Folder 27 Volcanoes, general
Box 14 of 18	Folder 28 Water
Box 14 of 18	Folder 29 Miscellaneous research notes on Parícutin Volcano.

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

## Series 7: MAPS OF MEXICO.

This series consists of maps collected by William F. Foshag on his many field trips to Mexico. Particularly represented are maps of the Parícutin region, Michoacan, Mexico.

### Box 15

Box 15 of 18

Folders 1-4 Maps of Mexico

[Digital Content: Fourteen maps \(including topographical\) documenting William F. Foshag's work across Mexico. \(Folder 1\)](#)

[Digital Content: Maps, illustrations, cross sections and black-and-white photographs documenting William F. Foshag's work in Mexico and Texas. \(Folder 2\)](#)

### Box 16

Box 16 of 18

Maps of Mexico

### Oversize

Oversize

Maps of Mexico

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

## Series 8: COPY NEGATIVES.

Box 17

Box 17 of 18

Copy Negatives 1-284

Box 18

Box 18 of 18

Copy Negatives 285-487

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