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MUSEUM NOTES

Museum of Northern Arizona



Published Monthly by the Northern Arizona
Society of Science and Art

Flagstaff, Arizona

Entered as second-class matter Feb. 18, 1931, at the post
office at Flagstaff, Ariz., under the Act of August 24, 1912.

Vol. 5, No. 8

February, 1933

Price 10c per copy

1932 AT THE MUSEUM

The Museum of Northern Arizona has passed through its fourth year of activity. This fourth year has been a busy one and notwithstanding the lack of funds, much permanent progress has been made.

In a museum, the human element is the most important factor in the success that it can achieve. The staff has been loyal and hard-working. The scientific results that they have produced are out of proportion to the size of the institution and compare favorably with the work of some of the large museums of the country.

The Museum suffered a great loss through the death of Mr. J. C. Clarke, a trustee, who had such a hearty interest in the archaeology of this region and who contributed many valuable items to the Museum's collection.

For exhibition purposes the whole clubhouse of the Flagstaff Woman's club is occupied. Through the kindness of the Monte Vista Hotel company, a fireproof store houses many of our study collections. On Coyote Range, three miles north of Flagstaff, a galvanized iron building, recently added to, holds the collection of stone, charcoal and beam material. In the laboratory at Coyote Range are stored the smaller artifacts, the large sherd collections, and textiles not on exhibition at the Museum. The Museum is greatly in need of a building to centralize its activities and bring the collections together under one roof.

Except for a few collections of no great value, the catalog is up-to-date. In this effort the members of the staff, and particularly Miss Katharine Bartlett, are to be congratulated.

The hoarding of scientific and artistic material is a minor part of a museum's functions. Its real function lies in the creative work of its departments.

Art and Ethnology

The work of the Department of Art and Ethnology, under Curator Mary Russell F. Colton, has centered, as in the past, on the Hopi Indians, although a beginning has been made with the Navajo. Indigo and long staple cotton have been made available to the Hopi. During the year the Museum has enlarged its collections of Hopi ethnology and arranged from these collections several exhibits of great educational value.

Through a study of wool and breeds of sheep, practical advice has been given the weavers, both Navajo and Hopi, in improving their textiles (Mus. Notes, Vol. 4, No. 12). Hopi legends have been recorded and much data of ethnological value has been collected. The four years intensive work with the Hopi is finally making an impression.

Five special exhibitions were held in the Museum: Second Annual Junior Art Show, May 5 to May 20; Third Annual Hopi Craftsman, July 1 to July 6; Fourth Annual Arizona Artists

Arts and Crafts, July 16 to July 31; a water color show by Mr. Edwin Earle, August 5 to August 31, and an exhibition of original Christmas cards, December, 1932.

Three traveling collections were on the road this year: (1) with the Indian Tribal Arts Exhibition which visited Philadelphia, Pa., Springfield, Mass., and Buffalo, N. Y. (2) Our special Hopi collection of art was shown at the Academy of Fine Arts in Honolulu in March. This collection is available for museums and Woman's clubs for a fee of \$15. (3) A special exhibition of Hopi and Navajo arts and crafts selected by the curator from the stock of Lorenzo Hubbell Jr., of Oraibi, has started its third year on the road, being sponsored by the American Federation of Arts, Washington, D. C. Rental fee, \$20.00.

Archeology

Under the direction of Lyndon L. Hargrave, the study of the pre-history of the region is progressing. The work has centered on the period known as Pueblo II. For four months the third annual Archeological Expedition of the Museum was in the field excavating early sites. A detailed report of this work will be found in Mus. Notes, Vol 5, No. 5.

Miss Bartlett and the director continued the archeological survey, adding 282 new sites.

Dendrochronology

Mr. John C. McGregor, Curator of Dendro-chronology, has worked on the tree rings exhibited in charcoal, collected by the archeological expedition. He has succeeded in dating six more sites (Mus. Notes, Vol. V, No. 3), among which N. A. 1625c is the earliest so far dated in the Southwest. One timber shows a cutting date of 784 A. D. He has added to our knowledge of tree growth in the area covered by the ash fall from Sunset Crater. One hundred ninety-one specimens were added to the collection, making a total of 2542.

Geology

The geological activities of the staff were mainly confined this year, as usual, to the summer months, but in spite of the short-

ness of the time, much valuable work was accomplished. Mr. L. F. Brady, Curator of Geology, made numerous expeditions to exposures of the sedimentary rocks in the neighborhood of Flagstaff. This resulted in a considerable addition to the Museum's collection of fossils from the Redwall and Kaibab limestones. Especially noteworthy is a series of caudal shields of minute trilobites from the upper portion of Kaibab formation, as well as Devonian fossils from the drainage of the East Verde and from the east side of Mt. Elden.

Towards the end of the summer most of the remaining bones of the Giant Ground Sloth (*Mylodon harlani*), which was located near Springerville and partly excavated by a museum expedition in 1931, were dug out by Dr. Cummings and deposited at the Museum. A number of these bones have been repaired but a great deal of work still remains to be done on the material. Some of the bones of the tail and feet are missing, but with these exceptions, nearly the whole of the skeleton has been recovered.

The most important piece of work undertaken during the season by the Curator of Geology, aided by Mr. McGregor, was a detailed study of the structure and fauna of the up-turned sedimentary rocks on the east side of Mt. Elden, 10 or 12 field trips being made for this purpose. Though the area is so much dissected and so heavily forested that accurate mapping was not feasible, a base map was prepared on the scale of four inches to the mile from the U. S. Survey map, the necessary changes of detail being made from observations with reflector compass and aneroid.

The director, with the aid of Miss Bartlett, continued to map the cones of the San Francisco Mountain volcanic area, adding 52 vents, making 212 recorded.

Biology

The Museum of Northern Arizona Biological Expedition of 1932 entered the field on June 27 under the leadership of Clifford M. Armack, Curator of Biology, aided by

J. Ferrell Colton, Assistant Curator.

The problem for the summer, as outlined by the director, was to compare the colors of similar kinds of animals on black, white, red, and yellow soils. Eight stations were selected which were visited at regular intervals.

The expedition worked seven weeks. About five thousand miles of territory were covered in northern Arizona. Over six hundred specimens were added to the Museum collection, of which one hundred and seven were small mammals. Eighteen different species of reptiles and amphibians were included in this collection. Sample specimens that were collected have been sent to leading zoologists for specific identification.

From June 4 to July 1, Randolph Jenks, Curator of Ornithology, assisted by Mr. Allan R. Phillips, continued the study of summering birds of the higher altitudes of the Peaks. Much time was devoted to a study of the life-history of Wright's Flycatcher which had not previously been found breeding within the state. June 21-22 were spent in Havasu Canyon.

As opportunity offered, Mr. Hargrave made notes and collections of birds from the region, principally from the forest phase of the Upper Sonoran and lower edge of the Transition Zones. During the year, 288 bird skins were added to the Museum collection. Results of the season's research shows eight new birds added to the state list. The occurrence of these birds is substantiated by specimens. Eight second records and three third records for the state were also made. The check list of birds of the San Francisco Volcanic Fields was increased by 43 new birds. Many valuable observations on the bird life of the region were made and two new breeding records for the state established. During the calendar year, 868 birds of 33 species and subspecies were banded at the Museum stations.

Publications

The Museum Notes have appeared monthly. A new series of Bulletins was established, designed as

a medium for papers too long and too technical for the Museum Notes. It will be the policy of the Museum staff to use the regular channels of scientific publication when publication can be had in a reasonable time. In certain fields these channels are so clogged that it is often several years from the time a paper is accepted until it appears. There is no excuse for scientific research if the results are promptly buried in a file.

The following papers were published in 1932 by members of the Museum staff:

- Bartlett, Katharine—Why the Navajos Came to Arizona, *Mus. Notes*, Vol. 5, No. 6. A Unique Pueblo II Bird Fetish, *Am. Anthro.* Vol. 34, No. 2, p. 315, April-June. Twelve abstracts for Social Science Abstracts.
- Brady, L. F.—Geological Activities of the Museum of Northern Arizona for 1931, *Mus. Notes*, Vol. 4, No. 9.
- Colton, Harold S.—1931 at the Museum, *Mus. Notes*, Vol. 4, No. 6. Walnut Canyon National Monument, *Mus. Notes*, Vol. 4, No. 11. Samuel Washington Woodhouse, *Mus. Notes*, Vol. 5, No. 1. A Possible Hopi Legend of Sunset Crater, *Mus. Notes*, Vol. 5, No. 4. Days in the Painted Desert, etc., *Bul. 2, M. N. A.* Sunset Crater, *Geo. Rev.*, Vol. 22, No. 4. Sunset Crater, Arizona Highways, Sept., 1932.
- Colton, Mary Russell F.—Wool for Our Indian Weavers, Etc., *Mus. Notes*, Vol. 4, No. 12.
- Hargrave, Lyndon L.—Oraibi, M. N. Vol. 4, No. 7, 1932. Guide to Forty Pottery Types, Etc., *Bull. 1, M. N. A.* Banding Report, 1931, Museum of Northern Arizona Bird Banding Station, Flagstaff, Arizona; News from the Bird-Banders, Vol. VII, No. 2. Miscellaneous Bird Notes, Etc., Grand Canyon Nature Notes, Vol. VII, No. 2. Woodhouse Jays on the Hopi Mesas, Arizona; *The Condor*, Vol. XXXIV, p. 140; Notes on Fifteen Species of Birds, Etc.; *The Condor*, Vol. XXXIV, pp. 217-220, 1932. The American Golden-eye in Arizona; *The Condor*, Vol. XXXIV, p. 227. The Museum of North-

ern Arizona Archeological Expedition, 1932; Mus. Notes, Vol. 5, No. 5.

Jenks, Randolph—Recent Bird Records from Havasu Canyon, G. C. Nature Notes, Vol. 7, No. 5.

McGregor, John C. — Additional Prehistoric Dates from Arizona, Mus. Notes, Vol. 5, No. 3.

Nequatewa, Edmund—The Ladder Dance, Mus. Notes, Vol. 5, No. 2 (Intro. by H. S. Colton). Hopi Legends of Sunset Crater, Mus. Notes, Vol. 5, No. 4. (Intro. by M. R. F. Colton).

Public Lectures

Katharine Bartlett, Lyndon L. Hargrave and J. C. McGregor—Work of the Museum in 1931, Feb. 16.

Dr. S. L. Boothroyd—The Sun and the Stars. January 26, 1932.

Dr. Earl Slipher—Mars and the Other Planets, June 13, 1932.

Accessions to the Museum

The number of accessions received from all sources number 2746. Most of them were supplied by Museum expeditions. Mrs. J. C. Clarke donated 659 negatives of archeological interest, taken by the late Mr. J. C. Clarke, as well as certain archeological material. Mr. Lyndon L. Hargrave contributed a very valuable collection of bird skins, numbering 288.

Individual donors were as follows: John C. McGregor, H. S. Colton, Mrs. H. S. Colton, L. F. Brady, Lyndon L. Hargrave, Mr. J. C. Clarke, Mrs. J. C. Clarke, P. J. McGough, Paul F. Rust, Melvin McCormack, K. L. Webber, J. E. Babbitt, Francis Decker, T. E. McCullough, J. E. Love, Max W. Miller, Stanley Sykes, Lewis D. Yae-

ger, all of Flagstaff. A. F. Jensen, Fredonia; Hubert Richardson, Cameron; W. N. Thomason, Leupp; C. W. Gilmore, Washington, D. C.; Arthur Woodward, Los Angeles Museum; Alexander Wetmore, Washington, D. C.; W. C. Roberts, Jeddito, Arizona; S. I. Richardson, Inscription House Lodge; Glenn Skiles, Phoenix.

Institutions: U. S. National Museum; Desert Branch of the Southwest Museum; Laboratory of Anthropology; State Museum of Arizona.

Library

The most important accessions were a portion of the library of the late Mr. J. C. Clarke (48 vols.) which were purchased from Mrs. Clarke. One hundred four reprints were received from other sources. The library now contains 2834 reprints and 174 volumes. The Museum library exchanges publications with 18 other institutions. Members of the staff have the use of a private scientific library containing 500 volumes and 19 journals.

Statistics, 1932

Attendance: Adults 3507; children 1982; total 5489, an increase of 50 over 1931.

Members: Active 90, student 5; corresponding 78.

—HAROLD S. COLTON,
Director.

Errata

Vol. 5

No. 7, p. 33, 2nd col., l. 13, read "December 19, 1853."

No. 7, p. 35, 1st col., l. 40, read "has rightly been proposed as . . ."

MUSEUM STAFF

Dr. Harold S. Colton, Director
Mr. Lyndon L. Hargrave, Field Director and Curator of Archaeology
Miss Katharine Bartlett, Curator of Anthropology
Mr. John C. McGregor, Curator of Dendro-chronology
Mr. L. F. Brady, Curator of Geology
Mr. Clifford Armack, Curator of Biology
Mr. Randolph Jenks, Curator of Ornithology
Mrs. Mary-Russell F. Colton, Curator of Art and Ethnology
Mr. Vergil Hubert, Draughtsman
Mrs. Alma H. Rust, Assistant Secretary
Jim Kewanwytewa, Assistant
Edmund Nequatewa, Interpreter