

published in a volume. Communications should be addressed to Dr. B. W. Aginsky, Sociology-Anthropology Department, Washington Square College, New York University, New York, N. Y.

THE Committee on the Chemistry of Proteins of the Division of Chemistry and Chemical Technology of the National Research Council has been granted \$3,600 by Eli Lilly, of Indianapolis, for the establishment of a National Research Council fellowship in protein chemistry. The recipient of the fellow-

ship is Dr. I. Fankuchen, who will carry on x-ray research on proteins in the laboratory of Professor B. E. Warren, at the Massachusetts Institute of Technology.

DR. GEORGE WASHINGTON CARVER, of the Tuskegee Institute, has given the sum of \$33,000 to establish a foundation for chemical research. The foundation will be asked to preserve the Carver Museum at the institute, which contains an exhibit of the uses of native materials. The museum also will house about 100 paintings by Dr. Carver.

DISCUSSION

RAINBOWS AT HONOLULU

IN 1938, a note by Lobeck on lunar rainbows evoked several responses, and the present writer offered some statements as to frequent occurrence of both solar and lunar rainbows in Hawaii.¹ From October, 1938, to the end of November, 1939, record was kept of solar rainbows seen from a single automobile, official car number 529, driven about 850 miles per month, chiefly in morning and late afternoon hours. (See Table I.) About 90 per cent. were seen by the writer, the remainder by one or more of his assistants.

TABLE I
RAINBOW OBSERVATIONS

Month*	Rainbows recorded	Number of different half days (morning or afternoon)	Number of different days
1938			
October†	10	9	7
November	9	5	4
December	21	14	13
1939			
January	19	16	12
February	15	10	8
March	10	8	8
April	11	11	9
May	23	12	9
June	15	11	8
July‡
August§	4	3	2
September	16	12	10
October	27	17	11
November	21	11	9
Average for complete months ..	17.0	11.6	9.3

* These figures have no validity as showing long-term, seasonal differences for different months.

† 19 days, October 13-31.

‡ Absence from Honolulu, no record kept.

§ Part of month, record incomplete.

In the total, a new view of a rainbow, seen from a different district a few minutes later, was recorded as a separate observation; the amount of such duplication is readily seen in Table I. A similar number of rainbows would be seen by any one spending a fair number of days in the open; a substantially larger number by persons on a daily delivery schedule or at work in the

open in particular districts. Following a note in the local papers, a number of contemporary and older observations of lunar rainbows were referred to the writer by letter and telephone, including statements as to prevalence nearly every lunar month at certain points, but statistical treatment is impracticable. In early October, 1938, while the writer was at Kilauea, Hawaii, a lunar rainbow was seen by numerous guests at the Volcano House.

CHESTER K. WENTWORTH

HONOLULU, HAWAII

A TYPE SPECIMEN COMES HOME

THE type specimen of *Delphinus calvertensis*, after an absence of more than 90 years from the National Paleontological Collections, has been returned. As an example of true scientific interest and generous co-operation this recovery of an important type, whose ownership was obscured by the lapse of time and by the passing of an earlier generation, is an event of more than ordinary interest.

The history of this specimen is as follows:

In 1841, Francis Markoe, Jr., corresponding secretary of the National Institute, made a geological excursion into Calvert County, Maryland. From a cliff in the vicinity of Cove Point the skull and neck of a cetacean was collected. In 1842, this specimen was described by Richard Harlan,¹ who named it *Delphinus calvertensis*. In 1846, April 29th, the National Institute was directed by Congress to deposit its collections in the Smithsonian Institution. In 1850, Jeffries Wyman² announced that Louis Agassiz (who was appointed professor of natural history in Lawrence Scientific School of Harvard University in 1846) was commencing a study of the Cetacea. At a meeting of the American Academy of Arts and Sciences in October, 1848,³ Professor Agassiz exhibited skulls of fossil cetaceans including the type of *Delphinus calvertensis*. In 1858, and 1862, the collections of the National Institute were transferred to the Smithsonian Institution,

¹ Richard Harlan, *Second Bull. Proc. Nat. Inst. for Promotion of Sci.*, Washington, D. C., 2, 195-196, figs. 1-4.

² Jeffries Wyman, *Am. Jour. Sci.*, 10: 230, footnote.

³ *Proc. Am. Acad. Arts and Sciences, Boston*, 2: 5, 1852.

¹ A. K. Lobeck, *SCIENCE*, 88: 187, 1938. Notes by W. J. Humphreys, R. L. Hightower and C. K. Wentworth, *SCIENCE*, 88: 496-498, 1938.

but this specimen was not among the materials received from that source. From the above chronological record, it is quite evident that the *Delphinus* skull was loaned to Professor Agassiz for use in his studies of the Cetacea and that it was in his custody when the actual transfer of National Institute specimens took place.

Recently the chronologic events in the history of this specimen were laid before Dr. Thomas Barbour, director of the Museum of Comparative Zoology in Cambridge, by Dr. Alexander Wetmore, assistant secretary of the Smithsonian Institution; the former acted promptly in having the specimen returned to the national collections. The type is in excellent condition and shows every evidence of careful handling throughout its unusual history.

C. W. GILMORE

U. S. NATIONAL MUSEUM

WAS THE AMERICAN MANO AND METATE AN INVENTION MADE DURING PLEISTOCENE TIME?

SEVERAL times since the writer discovered the deeply buried Gibson Site in January, 1930, he has found mano stones in the loose gravel below, and close to the bottom of the vertical bank containing the superimposed midden strata, at 24½, 27 and 30 feet below the present soil surface.¹ At this site in 1930 he found a mano stone immediately below a large hearth full of burnt stones, charcoal and a few man-made flint flakes. It lay in loose gravel as though it had just fallen out of the bank above. In 1936 another mano stone was found below the same bank. This mano has the same type of mineral incrustation which is found on the paleolithic type Abilene Points (Ray) found by the writer embedded in the 24½ feet deep stratum in the same site.^{1,2}

Recently another visit was made to this site, where about two inches of what seemed to be a mano stone was seen exposed in the red clay, at a depth below the present soil surface of thirty feet. On excavating the stone, he found it to be a typical mano firmly embedded in the hard, red clay and charcoal stratum.

This is the same Gibson Site where in 1938 an elephas leg bone was shown to Dr. Kirk Bryan where it was embedded in gravel in the bank at a place a short distance farther up the creek.^{3,4} This leg bone lay in a gravel stratum at approximately the same depth level and possibly in a later deposit than the silt in which the mano stone was embedded. Where the mano was excavated the gravel stratum lay six feet above it or at a depth of 24 feet below the sur-

face. Where the proboscidean leg bone lay, at a place estimated to be about 1,500 feet up the course of Elm Creek, the gravel stratum which contained the leg bone lay at about the same depth as the mano, (30 feet).

In 1939 the writer dug out a mano and portions of a broken metate buried 19½ feet deep in a charcoal stratum at the Hodges Site. The writer dug back into the hard silt eighteen inches to find the whole mano and the metate fragments. At that site the grinding implements were in a stratum containing quantities of charcoal, burnt rocks, mussel shells and some flint flakes.

The Gibson Site is where the original discovery was made of the paleolithic type Abilene Points buried in a stratum of charcoal, burnt rocks and flint flakes at a depth of 24½ feet below the present soil surface.^{1,2} Gibson Site is on Elm Creek, which is a branch of the Brazos River, near Abilene, Texas. Just above the top or 24½ feet deep midden level lies a hard compact stratum of gravel of an average thickness of about eight inches.

The three midden strata are imbedded in hard, compact red clay or silt below the gravel stratum. In 1934 the writer gave permission to E. B. Sayles to excavate in the Gibson Site for Gila Pueblo, and in their reports it is referred to as Stations 5 and 6. During that season several geologists inspected the site for Gila Pueblo, and among them were M. M. Leighton, of the Illinois Geological Survey. In Leighton's report, dated August, 1936, he divided the silts at this site into Elm and Durst silts. The lower or Durst silts he listed as Pleistocene in age in that report. A diagram of these is shown on page 9, Fig. 3, No. 1, of that report.⁵ It was in the lowest or Durst level that the proboscidean leg bone was found in 1938, in the portion of the Gibson Site which Leighton terms Station 6. This year the mano stone was found in gravel in the same lower or Durst level in what he terms Station 5 of the Gibson Site.⁶

However, no one had found Pleistocene animal bones in the Gibson Site creek bank deposits prior to this writer's finding of a proboscidean's leg bone in July, 1938. The ancient Abilene Points (Ray) found here are in no wise similar to those listed under that name by others. The writer believes that the Abilene Points (Ray) are very much older.

In 1937 Gladwin stated that grinding tools were found in the Cochise culture, and placed their age at 10,000 B.C. The finding of a mano embedded in the

¹ Cyrus N. Ray, *Bulletin of Texas Archeological and Paleontological Society*, 2: 48-52, plates 11-14 and 15, 1930.

² *Ibid.*, 6: 107 to 111, plate 18, 1934.

³ *Ibid.*, 10: 1, 269-273, plate 37, 1938.

⁴ Kirk Bryan, *Bulletin of the Texas Archeological and Paleontological Society*, 10: 1, 273-274, plate 37, 1938.

⁵ M. M. Leighton, "Geological Aspects of the Findings of Primitive Man near Abilene, Texas, Gila Pueblo, Globe, Arizona," pp. 16-20, Plate III-a, and Fig. 3, No. 1, 1936. (Stations 5 and 6 of Leighton's Report are his and Sayles's designations of the Gibson Site.)

⁶ E. B. Sayles, *Medallion Papers*, No. xvii, Gila Pueblo, Globe, Arizona, 1935.