western Saskatchewan. Folsom and Yuma artifacts were found in collections made in the vicinity of Calgary and in other collections extending as far east as Regina, Saskatchewan. The collection made by K. H. Jones near Mortlach, Saskatchewan, and described by Edgar B. Howard,¹ indicates that the Folsom complex is post-Wisconsin in age. Mortlach lies within the Altamont (Coteau) moraine, which is dated by W. A. Johnston² as probably being the terminal moraine of the Wisconsin movement. The Folsom artifacts of Jones's collection belong to the true Folsom type³ found in Colorado and New Mexico and are not of the questionable Folsom type sometimes known as Folsomoid, Folsom-like or Generalized Folsom. The same holds for the Folsom points from Alberta. Unless there was a long period of time during which Folsom points were manufactured, the whole Folsom complex may be dated as post-glacial. If glaciation is used as the criterion for the division between Pleistocene and post-Pleistocene, it follows that the Folsom complex is post-Pleistocene.

Near Loon Lake at the top of a pass between the Mackenzie and Yukon drainages, about eighty miles south of the Arctic coast, artifacts were found on terraces above the summit of the pass. These artifacts were flaked by the percussion method. No projectile points were found on the site, though future excavations might produce them. The crudeness of these artifacts and the types found indicate upon comparison with other American artifacts that they belong to an early culture phase. They are similar to the Lake Mohave, California.⁴ finds of the W. H. Campbells. They are also similar to the artifacts found by M. R. Harrington on the lowest and oldest horizon at Borax Lake, California.⁵ Not only is there a close resemblance between the artifacts, but both the Loon Lake site and the lowest cultural stratum of the Borax Lake site failed to produce projectile points. These artifacts may represent an early American culture which in a number of respects can be compared with the

paleolithic of Europe, although making this comparison does not necessarily imply that there is any connection between European and American finds, either in time or culture sequence. The comparison of early American stone implements with those of the European eolithic, paleolithic, and neolithic types is in all probability a false premise when such comparison is made to show that the two cultures are of the same antiquity. Northern and central Asia will undoubtedly be the areas that will produce artifacts that may be safely correlated with American finds. More work on early American archeology should be done in the glaciated areas where chronological dating in relation to the glacial periods is possible.

GREELEY, COLORADO

Wesley L. Bliss

THE BLUE JAY CACHED THE NUT

IN SCIENCE for January 13 of the present year, Arnold Gesell asks, "What did the blue jay do with the nut?" The west window of my Tropical Research Laboratory in the New York Zoological Park opens on an extent of lawn enclosed by shrubs and trees. This is a favorite place for the nut caches of grey squirrels. Scores of acorns are buried, some within a yard of the window.

This last autumn at least two blue jays have systematically robbed the squirrels. One bird which I watched, perched in a nearby tree. Within two minutes after a nut was pushed down and covered up by a squirrel, the jay was on the spot, and soon unearthed the acorn. It then flew up, perched for a few seconds, then returned to another part of the lawn, and jammed the nut into the ground, driving it home with repeated blows of its beak. This happened at least four times within an hour, and perhaps oftener. Two jays repeated this performance many times within a period of several weeks.

WILLIAM BEEBE

DEPARTMENT OF TROPICAL RESEARCH, NEW YORK ZOOLOGICAL PARK

SOCIETIES AND MEETINGS

THE PENNSYLVANIA ACADEMY OF SCIENCE

THE regular spring meeting of the Pennsylvania Academy of Science was held on April 7 and 8 at the Pennsylvania State College. A total registration of 157 is reported. Eighty-seven papers were read, distributed among the sciences, chiefly genetics, geology,

¹ Edgar B. Howard, American Antiquity, 4: 3, January, 1939.

²W. A. Johnston, "Quaternary Geology of North America in Relation to the Migration of Man; The American Aborigines," University of Toronto Press, 1933.

³ Howard, *ibid*.

4 Southwest Museum Papers, No. 11, 1937.

pharmacognosy, physical sciences, botany and zoology. The annual dinner was held at the Nittany Lion Inn on Friday evening. Following the dinner, an illustrated lecture was delivered by Dr. Arthur B. Cleaves, geologist with the Pennsylvania Turnpike Commission. Dr. Cleaves spoke on "Pennsylvania's All-Weather Highway." This is the new road which is tunnelling the mountains between Chambersburg and Pittsburgh.

The following officers were elected: *President*, Dr. R. W. Stone, Pennsylvania Topographie and Geologic Survey; *President-elect*, Professor H. W. Thurston,

⁵ Charles A. Amsden, correspondence.

Pennsylvania State College; Vice-president, Dr. C. A. Horn, Albright College; Secretary-Treasurer, Dr. V. Earl Light, Lebanon Valley College; Press Secretary, Dr. Bradford Willard, Pennsylvania Topographic and Geologic Survey.

Simultaneously with the meeting of the academy, 210 members of the Junior Academy met under the direction of Professor Karl F. Oerlein, Pennsylvania State Teachers College at California. It is planned to hold the 1939 summer meeting at Laporte, Pa., when geologic and biologic field trips will be arranged. The regular meting for 1940 is to take place at Washington and Jefferson College, Washington, Pa. The dates of these meetings are to be determined and announced later. BRADFORD WILLARD,

Press Secretary

THE OKLAHOMA ACADEMY OF SCIENCE

THE twenty-seventh annual meeting of the Oklahoma Academy of Science was held at Oklahoma Agricultural and Mechanical College, Stillwater, Oklahoma, on December 2 and 3, 1938. Of the 478 members, 275 attended the meeting. One hundred and twenty-five papers were presented in the various sections.

President Charles M. Perry presented the annual presidential address on Friday noon, December 2. The title of his talk was "The Doctrine of Levels Applied to the Sciences." Dr. Howard Odum, professor of sociology at the University of North Carolina, gave the annual address on Friday evening. The title of his lecture was "Social Conditions in the South." Another outstanding event of the meeting was an address by Dr. W. B. Bizzell, president of the University of Oklahoma at Norman. Dr. Bizzell spoke on "Regionalism in Public Life."

A research award of \$50 for 1938, financed by the American Association for the Advancement of Science, was made to Dr. Henry Artis Miley, of Oklahoma A. and M. College. Dr. Miley is investigating tarnish films on copper. L. D. Alley of Enid and Oneta Carroll of Newkirk, two outstanding students from the state high school science clubs, were elected for honorary membership in the American Association for the Advancement of Science. The annual business meeting was held on Saturday, December 3. The following officers were elected for 1939: President: H. D. Chase, University of Tulsa.

A. and M. College.

- Vice-President, Section A: Roy M. Jones, Central State Teachers College.
- Vice-President, Section B: Hugh M. Eley, University of Oklahoma.
- Vice-President, Section C: Mark R. Everett, Medical School of the University of Oklahoma.
- Vice-President, Section D: S. L. Reed, Oklahoma A. and M. College.

High School Relations Committee: Ora M. Clark, Bristow, and James G. Harlow, Oklahoma City.

Secretary-Treasurer: G. L. Cross, University of Oklahoma. Assistant Secretary-Treasurer: H. I. Featherly, Oklahoma

> G. L. CROSS Secretary-Treasurer

ACTIVITIES OF THE CUBAN SOCIETY OF NATURAL HISTORY

THE Cuban Society of Natural History (Sociedad Cubana de Historia Natural "Felipe Poey") held a memorial session on the one hundredth anniversary of the arrival in Cuba of three noted German naturalists: John Gundlach, Louis Pfeiffer and Edward Otto.

These three scientists, who had planned to go on to Central and South America, landed in Havana on the 5th of January, 1839. Gundlach, being unable to continue his trip to Surinam, Dutch Guiana, stayed in Cuba for the rest of his life and worked intensively on the Cuban fauna, building up a museum, the collections of which are to-day kept at the Instituto de la Habana. Pfeiffer, during his short stay, collected many mollusks and later was in constant correspondence with Gundlach, who supplied him with much material, enabling him to work extensively on the Cuban shells. Pfeiffer, due to his knowledge of mollusks, was called the "prince of malacology." Otto, botanist, collected a great number of plants from this tropical island. As a result of the work done by these scientists during the past century, the Cuban society rendered a hearty tribute to them at the University Museum (Museo Poey) in the University of Havana. This session, under the direction of Dr. Carlos de la Torre, president of the society, at the same time inaugurated its new board of governors, which had been elected last December to serve during 1939. LUIS HOWELL RIVERO

UNIVERSITY OF HAVANA

REPORTS

FINANCIAL STATUS OF THE BIOLOGICAL STAIN COMMISSION

THE Commission on Standardization of Biological Stains was organized nearly 20 years ago under the auspices of the National Research Council. The expenses in connection with organizing the work were borne by the Chemical Foundation. Later, as the work developed and as its possibilities for service to biologists became more and more evident, increasing support was obtained through the generosity of the foundation, until about 1928 one or two annual appropriations of roughly \$10,000 were thus granted the