A PLEISTOCENE EGG FROM NEVADA

WITH ONE ILLUSTRATION

By ALEXANDER WETMORE

The remains of eggs are so rare in fossil deposits that their occurrence is always of interest. Mr. Harry E. Wheeler, Assistant Professor of Geology in the Mackay School of Mines, University of Nevada, Reno, Nevada, has forwarded to me for study a most unusual specimen of this kind, consisting of the shell of approximately one-half of an egg of good size embedded in a cone of dendritic tufa. According to data supplied by Professor Wheeler this was found in 1934 by Mr. Ott F. Heizer of Lovelock, Nevada, on the extreme upper shoreline of Lake Lahontan, on the east slope of Lone Mountain, about three miles west of Lovelock, Pershing County, Nevada, at an elevation of about 4400 feet. The age is considered to be Pleistocene. The specimen is recorded as University of Nevada, Mackay Museum Paleontological Collection No. 1003, from U. N. loc. 27.

The egg apparently was deposited under water beneath a large cone of dendritic tufa, after which a second cone formed on the upper part of the egg to grow upward to attach to the under side of the larger cone. This second cone covered approximately the upper half of the egg, protecting that part of the shell so that it has been preserved while the free portion below has been broken away and lost.

The specimen measures about 63 mm. in length by 38.5 mm. in width. These dimensions are only approximate because of the breakage to which the egg has been

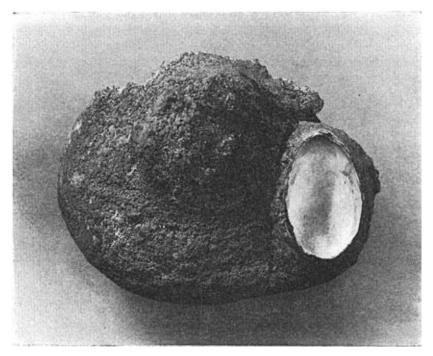


Fig. 29. Fossilized egg shell from the late Pleistocene of Nevada (about one-half natural size).

subjected, but are believed to be close to the original size. The specimen is elongate ovate in form. (See fig. 29.) The shell is well preserved and measures .3 mm. in thickness. The external surface where exposed is pale olive buff in color. On the inner surface at several points, particularly in one narrow, irregular band extending longitudinally along the distal third of the large end, are irregular, roundish spots of small size that seem to me to represent adventitious stains rather than the remains of shell markings. They are dull grayish in color. The shell is firmly held in a surrounding matrix to which it is closely bound for most of the circumference. At one point it was somewhat loose so that a small area of the external surface of the egg was freed for me by the skilled hand of Mr. Norman Boss, so as to allow examination.

The shape and texture of the shell are such as to leave no doubt in my mind that the specimen is actually the egg of a bird. Beyond this it is possible to speak only in supposition. The specimen may represent the egg of a bird of unknown family, or may come from a family group in existence today. The first proposal seems improbable as the appearance of the egg is such as to suggest a modern type, probably one of a group found in the Great Basin today. On this basis comparison has been made with eggs of living species of comparable size that range in that general area at the present time. These include the following: Western Grebe (Aechmophorus occidentalis), Farallon Cormorant (Phalacrocorax auritus albociliatus), Black-crowned Night Heron (Nycticorax nycticorax hoactli), Pintail (Dafila acuta tzitzihoa), Marsh Hawk (Circus hudsonius), Sage Hen (Centrocercus urophasianus), American Coot (Fulica americana americana), Franklin Gull (Larus pipixcan), and American Raven (Corvus corax sinuatus). The Pintail has been selected as representative of the family Anatidae of which a number of species nest in this area.

After a careful examination of eggs of these species with the unaided eye, with a large magnifying glass, and with a low power binocular microscope, the resemblance of the fossil is closest to the egg of the Cormorant. The egg of the Western Grebe is similar in form but has the external surface of the shell smoother, with numerous microscopic pits located in minute, longitudinal depressions. The shell surface in the Cormorant, where free from an overlying investment of the calcareous material which in whole or in part covers the external surface of the egg in this group, is found to be somewhat irregular, with scattered pits. The limited area of surface in the specimen under study is of exactly the same type. It is possible, therefore, that the egg was that of a species of the cormorant family (Phalacrocoracidae), though it must be pointed out again that this is merely supposition and that definitely diagnostic characters are not present.

United States National Museum, Washington, D.C., February 25, 1939.