

A SECOND PORCUPINE RECORD FOR ILLINOIS

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Approximately 3,200 bones and over 33,000 freshwater mussel valves (37 species) were identified from the faunal samples recovered at three Archaic Indian sites situated along the Wabash River in east-central Illinois. The field work at these sites (Riverton, Swan Island, Robeson Hills) took place during April, May, June and October, 1961, and was supervised by Mr. Howard D. Winters of the Illinois State Museum. The sites were spaced nearly equal distance (10 miles) from one another: Riverton, two miles northeast of Palestine, Crawford County, and Swan Island, located at the present Crawford-Lawrence county line were situated on the river flood plain, while the Robeson Hills village (two miles north of Vincennes, Indiana, Lawrence County, Illinois) occurred on the river bluff (isolated aggraded upland). Artifact assemblages, the faunal complex and radio-carbon dates suggest that the sites were occupied by the same group at different seasons or by contemporaneous groups.

Fish remains were more abundant at the Riverton and Swan Island sites, those of catfishes, bowfin and freshwater drum being the most numerous. Turtles had been taken in considerable numbers (six species represented). Although a minimum of 17 species of birds were identified, only the turkey had been utilized extensively. Of all vertebrate groups, mammals (22 species) were the most

important source of food to these peoples, the white-tailed deer constituting the basic meat staple in their diet. Numerous bones of raccoon, gray squirrel, beaver, cottontail, muskrat and other small mammals from these sites were indicative of former populations and of their extensive use by these Archaic groups.

Recovery of one skull and four mandible sections of the porcupine (*Erethizon dorsatum*) from the Riverton Site constitutes a noteworthy zoological record for the area. There are no historic accounts which definitely establish the porcupine as a former resident of Illinois and, previous to the recovery of the Riverton Site material, no remains have been found in any of the other numerous archaeological sites investigated thus far. The first record to indicate a former population of porcupine in Illinois consisted of several cranial bones and jaws recovered from a natural cave in Monroe County (Parmalee, Bieri and Mohrman 1961). This isolated find probably represents an early southern range extension of this rodent along the Mississippi River bluffs.

The Riverton Site material consisted of portions of four lower mandibles (three right jaws, consequently at least three individuals represented) and the right maxilla containing the premolar and molars 1 and 2. Two jaws contained the premolar and molars 1 and 2; one con-

tained all three molars, and the fourth jaw retained only molars 2 and 3. Fragments of an incisor and the proximal end of a radius from this site may also be referable to *E. dorsatum*. Two jaws found in the 36-42 inch level were dated, based on C 14 tests of charcoal from the levels, at $3,100 \pm 200$ years B.P.; the date from the 60-66 inch level, in which a third jaw was recovered, was $3,200 \pm 200$ years B.P.

The question arises as to whether the Indians obtained porcupines on the Illinois or Indiana side of the Wabash River. Lyon (1936) lists the published records with the dates of observation and the specimens in collection of the porcupine in Indiana; three were from counties (Vigo, Knox, Posey) bordering the Wabash River. There was no record of *E. dorsatum* from Sullivan County, Indiana, the county immediately east of Crawford County, Illinois, and the Riverton Site. This rodent was recorded from Vigo and Knox counties which border Sullivan County on the north and south, respectively, and it could have been quite possible for the Indians to have easily covered these short distances (minimum of about 15 miles) while hunting. However, the Archaic inhabitants of the Swan Island and Robeson Hills sites were closer to the porcupine's

known range in Indiana (Knox County, directly across the river), yet no remains of it were recovered at either site.

Rising over 150 feet above the Wabash River flood plain, Merom Bluff (about $1\frac{1}{2}$ miles northeast of the Riverton Site, Sullivan County, Indiana) is a $2\frac{1}{2}$ mile long section of wooded, sandstone bluff that could have served as suitable habitat for the porcupine. Approximately $2\frac{1}{2}$ miles south of the Riverton Site (Crawford County, Illinois), and paralleling the river for about $1\frac{1}{2}$ miles, is another wooded bluff (over 120 feet above the flood plain) that may also have been inhabited by this animal. Future archaeological excavations throughout the lower Wabash River Valley may establish conclusively the presence of a prehistoric population of porcupine on the Illinois side of the river. However, these remains of *E. dorsatum* from the Riverton Site are indicative of its former occurrence locally in the Crawford County, Illinois—Sullivan County (?), Indiana area.

LITERATURE CITED

- LYON, MARCUS W., JR. 1936. Mammals of Indiana. *Amer. Mid. Nat.*, 17(1): 384 pp.
- PARMALEE, PAUL W., R. A. BIERI and R. K. MOHRMAN. 1961. Mammal remains from an Illinois cave. *Jour. Mamm.*, 42(1): 119 pp.