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Nine Gal Tavern Faunal Analysis

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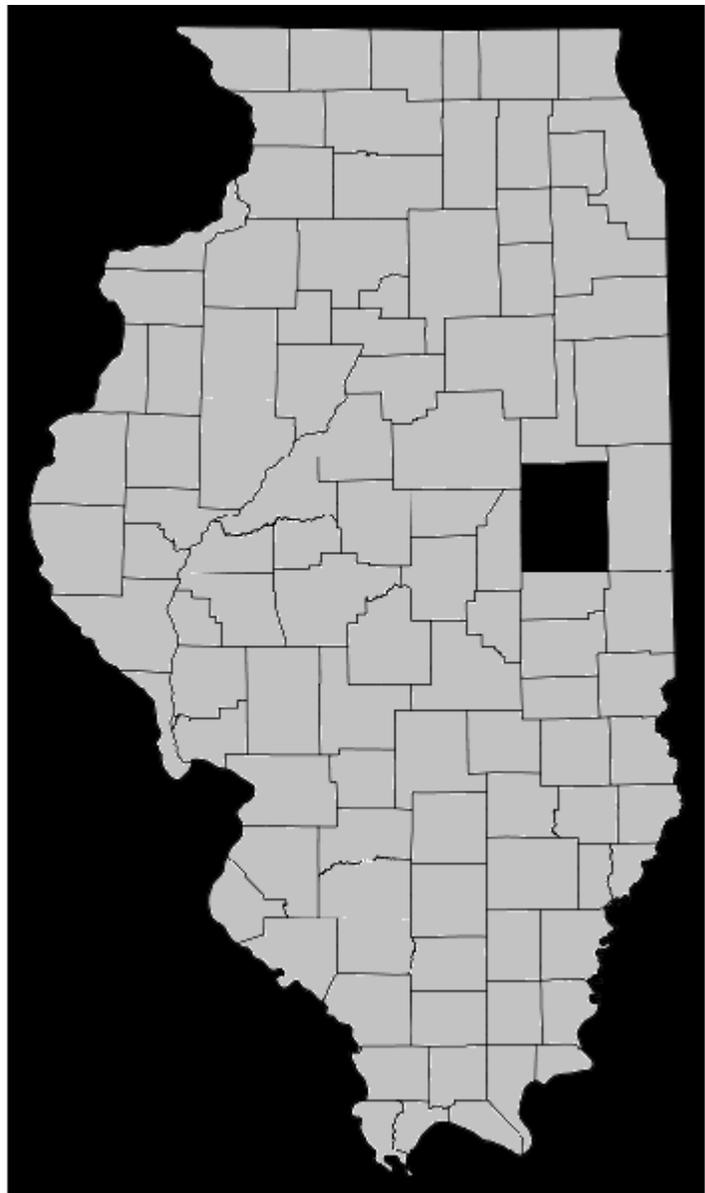
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Nine Gal Tavern
Faunal Analysis
by Zachary Boyer

Honors Project,
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Parkland College
Prof. Scarborough





Introduction

Over 400 pieces of bone and eggshell were collected during excavation at the Nine Gal Tavern site (11CH541) located in western Champaign County, Illinois in 1987 and 1991 by a team led by archaeologist Lenville Stelle (Stelle 2006). The majority of the remains analyzed were recovered within feature context in the immediate vicinity of the established Nine Gal Tavern structure. The purpose of this paper is to describe the identification of these faunal remains which are housed at the Anthropology Program at Parkland College. The identification of these remains was carried out as part of an Honors Project under the supervision of Steven Kuehn, Zooarchaeologist at the Illinois State Archaeological Survey (ISAS).

Site History

Occupation at the site first began in 1834 in line with increased settlement across Illinois following the end of the Blackhawk War and treaty with the Winnebago in 1832. The original home built on the site by the Bryan family would be managed by various individuals up until 1856 when the name “Nine Gal Tavern” was applied to the structure and site. This period is surrounded by varying tales of local folklore but much of it is still in need of documentation such as the name of the proprietor, which is still unclear.

Method of Analysis

Where possible, each specimen was appraised to determine the following characteristics: element, side of the organism, section or portion of fragmented element, and taxonomic classification. In instances where characteristics allow such as fusion of long bones, tooth eruption, and wear patterns; the general age of the host was also recorded. Recording of age was done in the pattern of juvenile or adult. The reassembly of bone fragments was not attempted in

cases where the taphonomy process show evidence that may represent bias in the final assemblage. To aid with the process of identification, an osteological collection and relevant reference manuals were employed. Manuals used for reference include *Mammal Remains from Archaeological Sites* and *Osteology for the Archaeologist* both by Stanley J. Olsen. For methodology and general practice, *Identifying and Interpreting Animal Bones* by April M. Beisaw and *Zooarchaeology* by Elizabeth Reitz and E. Wing were both very helpful.

Modifications such as those from knife, saw, and evidence of animal gnawing were observed and recorded where appropriate. Individual elements were additionally appraised to look for evidence of whether or not they had been subjected to heat. Examples found showed evidence of undergoing burning by a black appearance as well as by calcined examples which were evident from their white texture and transference of small amounts of similar colored powder to fingers and the work surface.

Due to the prevalence of fragmentation found among the assemblage, unidentifiable specimens were classified as small, medium, or large-sized within their applicable taxon based upon characteristics such as proportion to similar examples in the comparative collection. The legend for the method used here is described in the following sentences. Small-sized mammals were expected to be less than 10 pounds when living, medium-sized mammals ranged from 11 to 50 lbs, and finally large-sized mammals were individuals over 50 lbs in live weight. Where mammal specimens were unidentifiable within the above method they were simply labelled “mammal.” A similar method was applied in the case of birds but tailored to easily recognizable animals. Using the well-recognized chicken or *Gallus gallus* as the standard for “medium-sized bird,” specimens with larger characteristics were labelled as “large-sized bird” and the opposite holds true for those labelled “small-sized bird.”

Results

In all, 459 pieces of bone, both intrusive and otherwise were recorded in this faunal analysis. Of these, 47 show evidence of burning or calcification and 23 show evidence of modification such as cutting, sawing, or gnawing. Additionally, one specimen shows evidence of injury that had time to heal before the animal expired.

Mammals

The mammal remains in this collection represent the most prolific group present with 341 specimens present, of which 263 lacked sufficient distinguishing characteristics to be identified further.

Of the remaining seventy-eight identified specimens, sixty-three or approximately 80% belong to the domestic pig (*Sus scrofa*). Within the collection there is a minimum of 3 individuals present. Both adult and juvenile pigs are represented here. Within the assemblage, we find elements of nearly every portion of the body of the domestic pig save for the pelvis of which only one ilium fragment is found. Cranial bones, especially the mandible and maxillary fragments are the most common at 38 specimens. The limbs, both front and rear are the next most prevalent at 8 and 5 specimens, respectively. Axial portions and rib fragments share similar

totals with bones belonging to the feet and make up much of the remainder. Evidence shows fewer axial portions and incomplete sets of the limbs which suggests that processing of these mammals was done locally. This is further backed up by the abundance of cranial fragments and teeth present in the features. These factors seem to show a dispersion of the cuts most commonly consumed either at the site and disposed of elsewhere or relocated farther from the site of harvesting. Such cuts would likely have been shoulders and shanks from the forelimbs, hams from the respective rear, ribs or loins from the axial elements, and possibly products derived from the cranial region such as head cheese.

After the specimens identified as domestic pig the next most common mammal represented is the white-tailed deer (*Odocoileus virginianus*). Eleven specimens were identified as the aforementioned deer from a minimum of one individual. Antler fragments are most common but beyond this and in contrast to the domesticated pig the elements present are almost exclusively belonging to the front limbs. As deer in the Midwest tend to shed their antler from January to February the specimens here can likely be assumed to have been harvested later in the year. However due to variance within different geographic locations and the possibility of curation throughout the year it is also possible that the window of harvest for the deer remains could range from late May to the winter months.

In addition to the swine and deer remains, one complete phalanx of a cow (*Bos taurus*) was present. A thin v-shaped groove along the bone seems to indicate dismemberment. Three bones belonging to the fox squirrel (*Sciurus niger*) are also present constituting a minimum of one individual. None of the fox squirrel specimens exhibit any modification.

Within the remaining 263 mammal bones there are thirty-eight belonging to large mammals, nine to medium mammals, and 2 to small-sized mammals. Rib fragments are the most common among all three groups. These groups can be broken down as follows: The specimens belonging to large-sized mammals are comprised of nineteen long bone fragments and fourteen rib fragments. Specimens of medium-sized mammals number nine and four of which are rib fragments. Small-sized mammal specimens only consist of two specimens, both rib fragments.

Birds

The avian portion of the assemblage is comprised of ninety-five specimens of which forty-one belong to the domesticated chicken (*Gallus gallus*). A minimum number of three chickens are present both adult and juvenile. Specimens primarily belonging to the limbs. Only one specimen records anything in the way of modification. The radius of a juvenile chicken bears the cut mark of a knife.

In addition to the domestic chicken specimens there are six specimens belonging to the Cooper's Hawk (*Accipiter cooperii*). By indication of the femurs, there are a minimum number of two individuals present. No modification or cut marks are to be found on specimens of this taxon. It is likely that the Cooper's Hawk specimens present represent the presence of birds of prey at best considered pests but also possibly predatory in nature towards smaller livestock such as chickens. Despite the lack of modification, the prevalence of leg bones may indicate the

culling of these individuals via methods such as pole traps or the more modern equivalent, Fenn trap.

Forty-eight bird bones cannot be categorized beyond their respective sizes. The majority are long bone fragments predominantly from the legs. Of these 2 specimens show evidence of being burned, one a long bone fragment, and another a cervical vertebrae fragment from a medium bird. One juvenile specimen is present in a right coracoid belonging to a medium bird as well. One unidentifiable fragment belonging to a medium bird bears cut marks not seen in the rest of the assemblage. Even cut marks circle around the fragment seemingly as if someone was scoring the bone, which led to the clean break perpendicular to the length of the bone.

Other Taxa

Nineteen specimens, all complete, belonging to unidentified small amphibians such as frog or toad are also present in the collection. Tibiofibula, femurs, and urostyle facilitated this conclusion. Along with one shell belonging to an unidentified gastropod, these amphibian remains represent local fauna most likely intrusive in nature and not a staple part of the local diet. For the sake of completeness, the data surrounding the remains has been included in the provenience tables for the site.

A small amount of unidentifiable fish remains were also recovered from a feature. Consisting of ribs and due to the general nature of the bones, analysis proved impossible. Their presence in addition to the prevailing pattern of present taxon being in line with the general Upland South Diet make the inclusion of aquatic taxon a likely if less frequent element of diet (Kuehn 2007).

Very few eggshell fragments were identified at the site in contrast to common occurrences at rural farmsteads of the time. Recovery methods such as the presence or lack of flotation recovery often lead to bias in the taphonomy of elements such as eggshell. Therefore, analysis and assumption based upon these specimens will be withheld from this report.

Modified Bone

Twenty-four pieces of bone show signs of modification due to processes such as knife cuts, saw cuts, or consumption by another animal species. One thoracic vertebrae spine fragment belonging to domesticated pig shows evidence of an injury sustained that had time to heal before time of death. Knife cuts along bone fragments are most common with eighteen occurrences or approximately seventy-five percent of modifications evident. Evidence of chewing or gnawing is the next most prevalent with six specimens showing these marks. The remaining two instances consist of one saw mark and the aforementioned healed injury to a swine. With only three exceptions all modification is found on identified or otherwise large mammal remains. Among the three are one medium mammal rib fragment bearing knife cuts, one chicken long bone with similar cuts, and a peculiar scoring and breaking of a medium bird bone possibly belonging to an animal the size of a duck.

Knife cuts found on specimens tend to reflect further processing or fine scale dressing of cuts for consumption. Such precise cuts are often found at the terminal ends such as the distal or proximal ends of long bones. The collected specimens that show evidence of knife marks are in-line with this aspect of butchery and consumption. Additionally, the close proximity of the features in which specimens with cut marks were found to the structure itself further supports the thought of final preparation before cooking and consumption.

Distribution

All of the faunal material that was analyzed here was recovered from features at the site. When it comes to sheer volume of recovered material, Feature 3 yielded the most in the way of remains with 306 of the 459 specimens or 66.7% of that which was recorded. Feature 1 was the next most abundant with 123 specimens or 26.8% of the assemblage leaving 30 specimens to have been recovered from Feature 2. Material collected from feature locations likely constitutes a mix of refuse that was directly deposited there as well as midden debris that was subsequently deposited as the area was backfilled. Regardless, the consistency in which specific taxon and portions were found in respective locations is noteworthy.

Little can be drawn from the sparse nature of what was to be found in Feature 2 but patterns arise when the material recovered from Features 1 and 3 is isolated. Domestic pig remains found in Feature 1 make up the majority of those found at the site representing 55.6% of those recovered. Feature 3 possessed 31.7% in comparison. Despite there not being a great difference in number of specimens belonging to *Sus scrofa* in these two features, the nature of the remains evidences a stark contrast. Nearly all of the teeth, mandible, maxillary, and cranial fragments from domesticated pig are to be found in Feature 1. The specimens that make up the majority of those in Feature 3 are those of long bone fragments and identified portions of the fore and hind limbs. The abundance of cranial fragments belonging to a lesser utilized portion of the animal in Feature 1 seems to indicate that it was at this location that the greatest portion of butchery waste was discarded. Distal limb bones can offer similar insight into butchery practice and deposition yet their intermixing with the more frequently used portions of upper limbs and cut marks evident on those present in the assemblage may indicate Feature 3 as the location where waste from further dressing of cuts was discarded or at least nearer to the location where such activity took place. Specimens belonging to the white-tailed deer were more evenly distributed between features and yield little clues in their own right.

The idea that Feature 3 may have been the location for disposal of secondary butchering might further be supported by the distribution of chicken remains. 89.5% of chicken and unidentifiable avian remains were to be recovered from Feature 3. The identified portions of the Cooper's Hawk individuals were also to be found in Feature 3. Likewise, the only recovered specimens of eggshell were to be found here as well.

Discussion

When looking at the Nine Gal faunal assemblage it becomes apparent that there was an emphasis on domesticated animals, especially the domesticated pig. The occupants of the site would have consumed pork cuts such as shoulders, shanks, hams, ribs or loins, and perhaps

products derived from the cranial region such as head cheese. It is equally safe to say that chickens were widely utilized both in terms of their meat and in egg production. Beef may have been consumed but in a much more reduced manner than either pork or chicken. The plentiful nature of deer even to this day and the presence of said remains in the assemblage seems to indicate their place in the ordinary diet as well. Beyond deer, wild foodstuffs such as squirrel and fish may have supplemented diet based on availability or opportunity.

In its entirety, the assemblage provides an adequate sample with which we can make a preliminary analysis of the Nine Gal Tavern diet. The reliance on pork and chicken products as well as the inclusion of limited wild game is indicative of typical Upland South diets that can be seen throughout the area (Kuehn, 2007). A presentation by Terrance Martin following his appraisal of specimens from the larger assemblage seemed to indicate the same Upland South diet and is further supported by the findings here (Martin 1990).

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