

1982. Richland Creek Reservoir: a final environmental impact statement. Department of the Army, Corps of Engineers, Austin, Texas.
- DIXON, J. R. 2000. Amphibians and reptiles of Texas. Texas A&M University Press, College Station.
- GELWICK, F. P., B. D. HEALY, N. J. DICTSON, AND J. C. CATHEY. 2000. Fishes of the Richland Creek Wildlife Management Area of east Texas. *Texas Journal of Science* 52:313–318.
- HEYER, W. R., M. A. DONNELLY, R. W. MCDIARMID, L. A. HAYEK, AND M. S. FOSTER. 1994. Measuring and monitoring biological diversity: standard methods for amphibians. Smithsonian Institution Press, Washington, D.C.
- MEFFE, G. K., AND C. R. CARROLL. 1997. Principles of conservation biology, second edition. Sinauer Associates Inc., Sunderland, Massachusetts.
- NEWMARK, W. D. 1995. Extinction of mammal populations in western North American national parks. *Conservation Biology* 9:512–526.
- ROBERTS, H. R., T. W. JOLLEY, L. L. PEPPERS, J. C. CATHEY, R. MARTINEZ, J. A. PEPPERS, A. L. BATES, AND R. D. BRADLEY. 1997. Noteworthy records of small mammals in Texas. *Occasional Papers, Museum of Texas Tech University* 172:1–7.
- SCHMIDLY, D. J. 1983. Texas mammals east of the Balcones Fault zone. Texas A&M University Press, College Station.
- SIMPSON, B., D. FRELS, T. LAWYER, T. MERENDINO, E. MEYERS, D. RUTHVEN, S. SOROLA, AND M. WAGNER. 1996. Baseline inventory and monitoring procedures on Texas Parks and Wildlife Department lands. Texas Parks and Wildlife Press, Austin.
- WILKINS, N., A. HAYS, D. KUBENKA, D. STEINBACH, W. GRANT, E. GONZALEZ, M. KJELLAND, AND J. SHACKELFORD. 2003. Texas rural lands: trends and conservation implications for the 21st century. Texas Cooperative Extension, Texas A&M University, Technical Report B-6134:1–26.
- WILSON, E. O. 1992. The diversity of life. Belknap Press of Harvard University Press, Cambridge, Massachusetts.

*Submitted 27 May 2003. Accepted 15 March 2004.
Associate Editor was Cheri A. Jones.*

ADDITIONS TO THE ARCHAEOLOGICAL FAUNA OF THE FORMER CHINATOWN SECTION OF EL PASO, TEXAS

ARTHUR H. HARRIS*

Laboratory for Environmental Biology, Centennial Museum, University of Texas at El Paso, El Paso, TX 79968

**Correspondent: aharris@utep.edu*

ABSTRACT—Additions to the archaeological fauna recovered from the former Chinatown section in El Paso, Texas (late 1800s), include lizard, ringtail, dog, killdeer, domestic goose, badger, domestic cat, jackrabbit, and cottontail. The latter 5 species likely were used for food. Two species of turtles used as food also are discussed.

RESUMEN—Las adiciones a la fauna arqueológica recuperadas en la anterior sección de Chinatown en El Paso, Texas (a finales de 1800), incluyen la lagartija, el cacomixtle, el perro, el tildío, el ganso doméstico, el tejón, el gato doméstico, la liebre, y el conejito. Las últimas cinco especies probablemente fueron usadas como alimento. También se discuten dos especies de tortugas usadas como alimento.

The Southern Pacific Railroad reached El Paso, Texas, early in 1881, and in 1883, with completion of railroad-connected employment, Chinese laborers were laid off and stranded in El Paso. This initiated the formation of a Chinatown section. For some years, there apparently was little contact with other

Chinese settlements. Eventually, however, the El Paso colony made contact with Pacific Coast centers for traditional supplies and established traditional social relationships within the community. By about 1915, Chinatown as a distinct entity was gone (Staski, 1985).

In the early 1980s, the Cultural Resources

TABLE 1—Distribution of selected taxa within the Cortez archaeological site, El Paso, Texas. Numbers refer to the number of identified specimens, with the minimum number of individuals given in parentheses (calculated per level). Only levels pertinent to this study are shown.

Taxon	Trench 2	Trench 10	Feature 15 (7 levels)							
			3	4	5	6	9	14	16	
<i>Chrysemys/Trachemys</i>	2		13 (2)	33 (3)	17 (2)					
<i>Trionyx spiniferus</i>		14 (1)	4 (1)		14 (2)	31 (1)			5 (1)	
Sauria					2 (1)	1 (1)				
Goose (? <i>Anser</i>)	2 (1)				3 (1)					
<i>Charadrius vociferus</i>	2 (1)									
<i>Canis familiaris</i>							1 (1)			
<i>Bassariscus astutus</i>										14 (1)
<i>Taxidea taxus</i>									1 (1)	
<i>Felis domesticus</i>				1 (1)				2 (1)		
<i>Lepus</i> cf. <i>californicus</i>									2 (1)	
<i>Sylvilagus audubonii</i>								5 (2)		
cf. <i>Sylvilagus</i>									2 (1)	

Management Division of New Mexico State University, under contract with the city of El Paso, conducted archaeological excavations at the Cortez Parking Lot Site. The location in downtown El Paso lies within the northeastern part of the old Chinatown area (Staski, 1985). The recovered archaeological material is deposited in the Centennial Museum collections at the University of Texas at El Paso.

The faunal remains from portions of a single, huge trash pit (Feature 3-3/14-14) were analyzed by McEwan (1985) and, until the current study, represented the only bioarchaeological information available. She reported a total of some 22 taxa, ranging from a cricetine rodent to turtles to bear (*Ursus*); the primary food base, as determined by estimated biomass, consisted of pork (25.3%), beef (70.7%), fish (8.6%; many of them marine and apparently shipped from the Pacific Coast), and domestic birds: chicken (2.4%), duck (0.6%), and turkey (0.1%).

Much of the faunal material that was excavated in 1984 and 1985 remains unstudied. In 2000, a small proportion of the unstudied faunal remains was identified by students as part of the requirements for a University of Texas at El Paso course in bioarchaeology. Several of the taxa identified were not reported by McEwan (1985). The purpose of this note is to record and comment on those taxa and to expand on the few comments by McEwan (1985) regarding the turtle remains. The bulk of the

material is of domestic forms and is similar to that noted by McEwan; it is not addressed further here.

Most of the faunal sample examined by the students came from Feature 15 (Table 1). The lower parts of this feature represented a privy filled with trash. The uppermost levels were concentrations of trash above the privy fill and thought to be overflow from the same deposit; however, portions might be a continuation of Feature 3-3/14-14 (Staski, 1985). Dates likely are from late in the 1800s rather than representing earliest inhabitation (Staski, 1985).

The remainder of the faunal material (77 of 1,060 items) was recovered from the uppermost level of test trenches 2 and 10. These trenches were excavated by heavy equipment in 1984 to aid in the research design for the 1985 excavations. Artifacts and faunal remains were recovered when seen and by a random, one-shovel-full, screened sample from each approximately 12 cubic feet of fill. The material from test trench 2 (29 elements) likely is from an extension of the feature investigated by McEwan (1985).

Preliminary identifications were made by class members and were later checked by the author. Items were identified by direct comparison with faunal materials in the Laboratory for Environmental Biology (LEB) collections at the University of Texas at El Paso. The identified faunal materials are deposited under 711 catalogue numbers in the LEB Paleobiology



FIG. 1—Dorsal (bottom) and ventral views of the domestic cat scapula from archaeological sample, El Paso, Texas. Cuts shaping the recovered piece are clearly visible, as are cuts on the ventral surface.

collection under site number 278, cross-referenced to Centennial Museum numbers.

Two groups of turtles were well represented, and a number of elements of both showed butchering cuts. The Emydidae is represented by individuals within the *Chrysemys/Trachemys* complex, most likely *Chrysemys picta* (painted turtle), *Trachemys gaigeae* (Big Bend slider), or both. The rear margin of the carapace, said to allow differentiation between these 2 species (Degenhardt et al., 1996), is not represented in the material. The Trionychidae is represented by numerous elements of *Trionyx spiniferus*, the spiny softshell turtle. Although McEwan (1985) reported the presence of *Chrysemys/Pseudemys* and *Trionyx*, numbers of remains in the present sample differ strongly from those within her sample of 6,704 items: 72 emydids in this study compared to 28, and 136 *Trionyx* compared to 20.

An unidentified medium-sized lizard is represented by a humerus, femur, and innominate. Recovered from 2 adjacent levels, likely 1 individual is represented.

Although the Anseriformes (waterfowl) was well represented by ducks of the genus *Anas* in the sample reported by McEwan (1985), she did not record geese. I identified 5 goose elements, tentatively assigned to *Anser*; 3 display butchering marks. The proximal half of a right humerus and the distal quarter of a left humerus were identified as killdeer (*Charadrius vociferus*). Neither shows signs of human usage.

One astragalus of a domestic dog was identified. The nature of preservation suggests it had been scavenged and passed through the digestive tract of another animal. Thirteen elements of a ringtail (*Bassariscus astutus*) are present in the sample. Although epiphyses are missing, M1 and M2 are erupted, suggesting near-adult status. There is no indication of human or carnivore usage. The proximal end of the ulna of a badger (*Taxidea taxus*) has the tip of the olecranon process severed and a medial cut into the bone at the semi-lunar notch; the bone is broken off at the level of this cut. The domestic cat is represented by a skull and lower jaws, part of a cervical vertebra, and the anteroventral portion of a butchered right scapula (Fig. 1).

Distal ends of 2 left femora are from a large lagomorph, presumably the black-tailed jackrabbit (*Lepus californicus*). One femur has the

joint end cut away; in the other, the distal end was severed from the shaft by a slanting cut. Seven elements were identified as cottontail rabbit and presumably represent the only local species, the desert cottontail (*Sylvilagus audubonii*). The proximal and distal ends of a right tibiofibula had been severed, and a proximal left tibiofibula had been cut from the diaphysis. The left radius and ulna from the same individual had the distal ends cut away by a single action.

Although remains of the larger animals recovered, such as pigs, often display saw-marks or suggest utilization of a cleaver-like utensil or hatchet, observed butchering marks on the taxa treated here are primarily suggestive of knife use.

Utilization of the domestic forms reported is not surprising and would be expected among Chinese and non-Chinese alike. Likewise, lagomorphs, easily obtained locally, might well have been used by both. A few *Trionyx* fragments have been recovered from the nearby, post-railroad Kohlberg Parking Lot archaeological site, indicating use by other ethnic groups (McEwan, 1984). However, use of badger and domestic cat as food items suggests either cultural differences or desperation.

Turtles could have been collected from relatively nearby. The Rio Grande is less than 1.7 miles distant from the site (Staski, 1985), and an acequia approached to about one-quarter mile or closer (Staski, 1984). Differences in numbers from the McEwan (1985) sample most likely are accidents of deposition. Most remains from the current study are from upper portions of Feature 15—parts that likely are contemporaneous with 3-3/14-14 and might be an extension of those deposits (Staski, 1985).

The recovery of a number of ringtail bones from a single individual, with both body and head elements represented, suggests a burial or discard of an entire individual as a unit rather than utilization for food. Likewise, there is no evidence to suggest skinning for the pelt. Its presence suggests activity ranging into the Franklin Mountains north of the site, because the location of the site on the Rio Grande floodplain is not ringtail habitat. Possession as a pet, such as occasionally occurs today, is a possibility for its presence.

Badgers are wide ranging in the area,

though presumably not apt to wander into urban situations. Butchering marks indicate use for food, because neither cut would be necessary for skinning. Cats presumably ranged freely within the town and were there for the taking.

LITERATURE CITED

- DENGENHARDT, W. G., C. W. PAINTER, AND A. H. PRICE. 1996. Amphibians and reptiles of New Mexico. University of New Mexico Press, Albuquerque.
- MC EWAN, B. G. 1984. Appendix C: faunal analysis. In: Staski, E. Beneath the border city: urban archaeology in downtown El Paso. New Mexico State University, University Museum Occasional Papers, Number 12:271–301.
- MC EWAN, B. G. 1985. Appendix B: faunal analysis. In: Staski, E. Beneath the border city, volume 2: the overseas Chinese in El Paso. New Mexico State University, University Museum Occasional Papers, Number 13:262–283.
- STASKI, E. 1984. Beneath the border city: urban archaeology in downtown El Paso. New Mexico State University, University Museum Occasional Papers, Number 12:i–xiii, 1–355.
- STASKI, E. 1985. Beneath the border city, volume 2: the overseas Chinese in El Paso. New Mexico State University, University Museum Occasional Papers, Number 13:i–xii, 1–302.
- Submitted 1 November 2002. Accepted 28 February 2004. Associate Editor was Cheri A. Jones.*