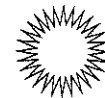


KANSAS ARCHAEOLOGY

EDITED BY

Robert J. Hoard and William E. Banks

Foreword by Alfred E. Johnson



Published in Association with
the Kansas State Historical Society
by the University Press of Kansas

10. The Great Bend Aspect

Donald J. Blakeslee and Marlin F. Hawley

This chapter is a review of the archaeology of the late prehistoric to early historic Wichita bands in Kansas. Waldo Wedel (1935a, 1959), who conducted excavations in two of three known settlement clusters, classified the remains in the McKern taxonomic system as the Great Bend aspect. He classified the sites in Rice and McPherson counties as the Little River focus and those along the Kansas-Oklahoma border as the Lower Walnut focus (Figure 10.1). Since then, there has been work on a third cluster of villages near Marion (Lees 1988; Lees et al. 1989; Rohn and Emerson 1984). In addition, recent studies have dealt with sites other than village clusters. Wedel also explored sites that are called council circles, and in recent decades, work has been done on ground figures or intaglios, on quarries, and on hunting camps (Blakeslee and Rohn 1986; Mallam 1982; Stein and Reynolds 1994).

Also since Wedel's classic work, we have learned something about Great Bend houses, and, as archaeological methods have improved, we have gained important knowledge about the economy of these people, including hints regarding the extent of individual band territories. Great Bend sites contain some of the finest stone and bone artifacts to be found on the Great Plains, and the chapter summarizes and illustrates the artifacts as well.

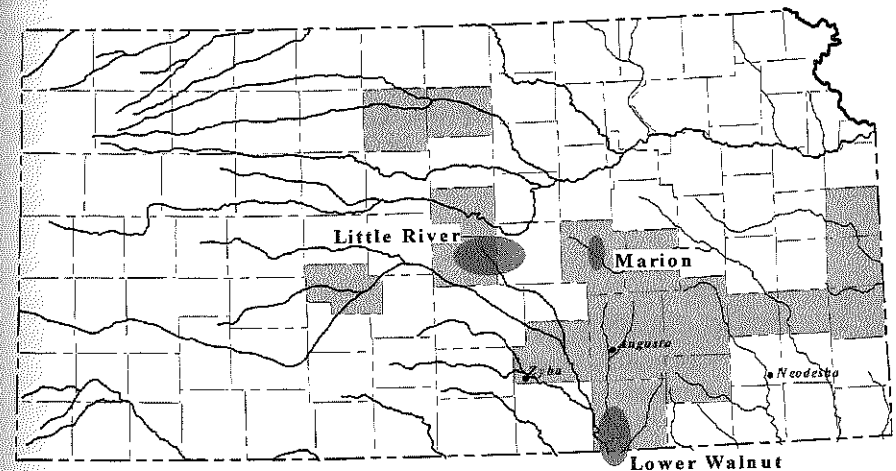


Figure 10.1. Location of village clusters and isolated sites mentioned in the text. Counties known to contain Great Bend hunting camps are shaded.

The Great Bend aspect is easily the most studied archaeological complex in Kansas, and very early reports include both surface investigations (Billings 1882; Mead 1890: 64; Mudge 1873; Richey 1904; West 1880) and excavations (Gould 1898a, 1898b, 1899; C. P. Johnson 1897; O. T. Mason 1881; Putnam 1880). The most significant investigations of the era were conducted in the early 1880s by Johan Udden of Bethany College. Over a five-year period of time, he excavated at the Paint Creek site (14MP1) in McPherson County and concluded that the inhabitants were probably horticulturalists and were ancestral to the Wichita or the Pawnee. He attributed a rusted mass of chain mail armor to a visit by the Spanish, perhaps Coronado (Udden 1900: 73–78). Udden's important contribution has been reprinted recently, along with a number of important accompanying contributions in volume 23 of *Kansas Anthropologist* (2002). Also of considerable importance was the work of the Jones brothers in Rice County that generated the hypothesis that the Great Bend sites there were the ones visited by Coronado (H. Jones 1928; P. A. Jones 1929, 1937; Ross 1928).

Starting in 1934, systematic scientific study of sites in Kansas was initiated by Waldo R. Wedel, first with the Nebraska State Historical Society and later with the Smithsonian Institution (Wedel 1935a, 1935b). Wedel not only named the complex, for the location of a major concentration of its sites north of the great bend of the Arkansas River, but also determined its approximate age and its affiliation with the Wichita bands, and he provided the description of its material traits that established the baseline for all future research (Wedel 1942, 1959). Based on his fieldwork, he defined two foci (Little River and Lower Walnut) for two of the three major site clusters of the Great Bend aspect (Figure 10.1). Later investigations revealed that the third cluster, near Marion, was roughly equivalent in age and composition to the other two (Barr 1973; Emerson 1977; Lees et al. 1989; Rohn and Emerson 1984; Roper 2000b, 2000c). Keller (1961) investigated a series of sites in the vicinity of the city of Augusta in Butler County, which he related to those in the vicinity of Arkansas City. Other work has been carried out by seven Kansas Archeology Training Program excavations between 1977 and 1993 (Lees and Mandel 1993; Loosle 1991; Rowlison 1981, 1983a, 1983b; Stein 1992; Witty 1977, 1986, 1992; Wulfkuhle 1993). The majority of the resulting collections await intensive analysis. Much recent work has been done in the vicinity of Arkansas City (Rohn 1994; Rohn, Larson, and Davis 1982), especially a massive project done by the Kansas State Historical Society in advance of levee construction and highway relocation (Hawley 1994, 1995, 2000; Hawley and Haury 1994; Hawley et al. 1994; Holland 1998; Perttula, Hawley, and Scott 2001; Thies 1991a, 1991b; Wulfkuhle 1993). The final report on this work is in preparation (Stein, personal communication, 2005) and will be a major contribution to our understanding of Great Bend archaeology. An annotated bibliography for Great Bend archaeology is now available (Hawley and Blakeslee 2003).

Chronological understanding of the Great Bend aspect is based primarily on radiocarbon dates, with seriation ages of southwestern trade ceramics providing additional insights (Hawley 2000; Rucker 1971; Terry and Terry 1961; Thies 1987; W. R. Wedel 1950, 1982). A large series of radiocarbon dates is now available for the Lower Walnut focus sites (see Appendix), with a smaller but still reliable set from the Little River focus sites and only a few dates from the cluster of villages at Marion. In general, the dates suggest that the Great Bend aspect began at about A.D. 1425 and lasted up to the last quarter of the seventeenth century. There is, however, a cluster of early dates from the excavations in the Lower Walnut sites that suggest an occupation in the late thirteenth to early fourteenth centuries. Whether or not these dates derive from a pre-Great Bend occupation of the Lower Walnut valley has not been determined.

SITE TYPES AND SETTLEMENT PATTERN

Most Great Bend aspect habitation sites lie in three clusters: around Marion, near the junction of the Walnut and Arkansas rivers (Lower Walnut focus), and in Rice and McPherson counties (Little River focus). Each cluster consists of a scattering of large and small sites, and early Spanish visitors noted the extensive nature of the Wichita settlements they visited (cf. M. M. Wedel 1979, 1982). Roper (2002d) relates the settlement pattern to the style of floodplain agriculture known from the Mississippian tradition. There are also a few isolated habitation sites, such as those at the Zyba site in Sumner County and the Augusta site (14BU501) (Figure 10.1). Finally, near Neodesha on the Verdigris River, there was once an earthwork and related sites that appear to be of late Great Bend aspect affiliation (Wedel 1959: 526–534; Weston and Lees 1994).

Prior to agricultural disturbance, low midden mounds marked the village sites. For instance, the Tobias site, as mapped by Wedel, contained 19 such mounds. It also featured numerous small depressions that marked the locations of cache pits. The village sites yield a wide range of artifacts, including pottery. This distinguishes them from a second kind of site present in the Lower Walnut focus. These sites are located adjacent to the village cluster and lack pottery. In such sites near Winfield, D. Hill and Blakeslee (1983: 29–33) found assemblages that differed significantly from those Wedel had excavated from Lower Walnut villages. In addition to the absence of pottery, these sites had a much higher proportion of heavy chopping tools and far fewer endscrapers than the village sites. Apparently these sites were created by people engaged in extracting a limited variety of resources.

Great Bend aspect hunting camps are widespread in Kansas (Figure 10.1). First reported by O'Bryant (1947) in Sedgwick County and by C. S. Smith (1949a) on the Smoky Hill River, they were later found as far east as Hillsdale Lake in Miami County

(Blakeslee and Rohn 1986), at Toronto Lake in Woodson County (J. H. Howard 1964), and in Bourbon County and in Vernon County, Missouri (Feagins 1996). The most intensively occupied hunting camp found so far is the multicomponent Lewis site (14PA307) at Larned (Monger 1970; Ranney 1994). The hunting camps suggest that Great Bend aspect territory extended much farther east and north than previously suspected, and the easterly distribution of some of them suggests that the Osage, who later claimed the area and presumably excluded Great Bend aspect people, arrived in western Missouri sometime during the early Historic period.

Several Great Bend aspect village sites contain features known informally as council circles. These are low mounds surrounded by a series of shallow depressions. When Wedel (1959: 215–229) tested one such feature at the Tobias site (14RC8), he found the central mound to be composed of earth mixed with midden material underlain by some cache pits. While the depressions that were tested proved to be devoid of cultural material, Wedel did uncover two structures that were not marked by surface features. The structures were elongated, rather sausage-shaped, and apparently had earth- and sod-covered superstructures. They contained a complex set of features including cache pits, hearths, postmolds, sandstone slabs, and human skeletal remains (Figure 10.2).

The contents of the central mound and associated structures did not provide a clear indication of the purpose of the council circles, but Wedel (1967) found solstice alignments between three of the council circles in the Little River locality. More recently, Susan Vehik (2002a, 2002b) has interpreted the structures in the council circles as the residences of priestly leaders.

On a ridge above the council circles in Rice County is a ground figure in the form of a giant serpent. An intaglio (the reverse of a bas-relief), it was formed by removal of the sod and topsoil. Today it is marked by a low depression that supports only short grasses in contrast to taller grasses all around it. The serpent is 48 meters long and appears to hold an oval object in its open jaws (Figure 10.3). Mallam (1982) determined that the jaws align with two of the council circles in the vicinity. This alignment and the recovery of two

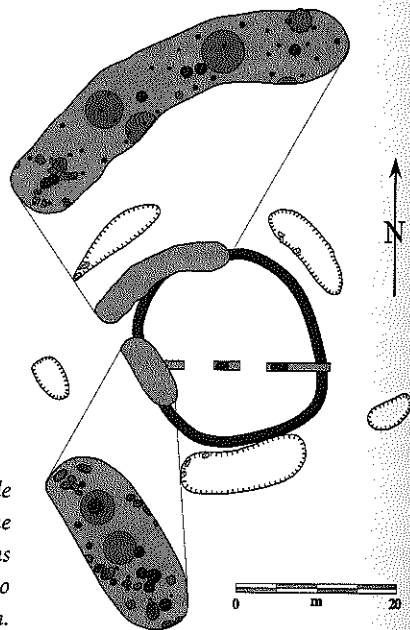


Figure 10.2. Wedel's excavations in the council circle at the Tobias site. Dark gray open ring marks the limits of the central mound. Wedel's excavations are shaded light gray. Enlarged views of the two excavated structures are shown at top and bottom.

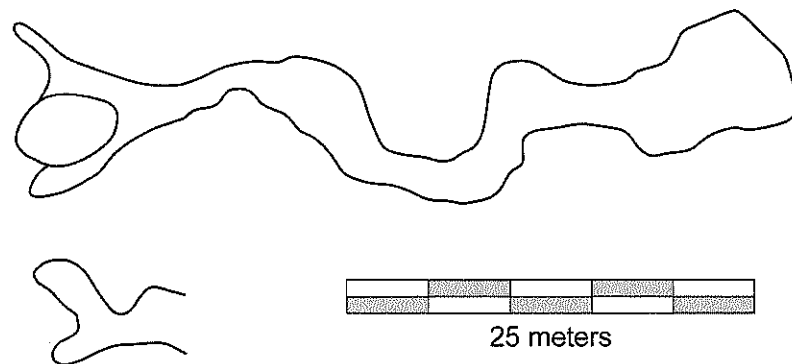


Figure 10.3. Comparisons of the depressions at two Kansas intaglios. The left-hand side of the Sage site intaglio (bottom) has been obscured by modern activities.

small flakes of Alibates agatized dolomite from a test trench are the only evidence that associates the serpent with the Great Bend aspect. The significance of the Alibates is explained below.

The serpent is one of three intaglio sites known to exist in Kansas. The other two also lie within Great Bend aspect territory as it is defined by the distribution of hunting sites. The Sage site, on the south side of Waconda Lake, is two miles south of Waconda Spring, a major sacred site. This site has been disturbed by historic activities, but the portion that remains bears a close resemblance to the open mouth of the serpent in Rice County (Figure 10.3). The third site, the Walter Hutchinson site (14SG557), is located west of Wichita. It contains low earthen walls and shallow ditches as well as four apparent intaglios, but no artifacts have been recovered from it, and there are no reported sites in the immediate vicinity (Figure 10.4).

Other sites likely to be associated with the Great Bend aspect include cairns, petroglyphs, and quarries. There are petroglyphs at the Peverly site (14RC10), which lies between the Serpent intaglio and the Tobias site, and there are other petroglyphs in the vicinity of the Lower Walnut sites (Wedel 1959: 492). It is interesting that there is rock art near Thompson Creek, a hunting camp, and in the Woodson County rockshelters. J. H. Howard (1964), using content as his criterion, believed that people from Great Bend aspect sites created the rock art in the shelters. Wedel (1970d) made the same point. Recently, local residents have reported a piece of rock art near Fall River that is described as a depiction of a serpent with an object in its mouth, i.e., very similar to the intaglio near Lyons but on a much smaller scale and in a different medium.

On the bluff above the Peverly site are three stone cairns. Only the spatial association ties them to the Great Bend aspect. Major quarries of Florence A chert exist near Maple City, Kansas, and Hardy, Oklahoma (Gould 1898b, 1899; Stein, chapter 16, this volume; Wedel 1959: 476–480). Both appear to have seen heavy use by Great Bend aspect populations. Other lithic sources used by them are discussed below.

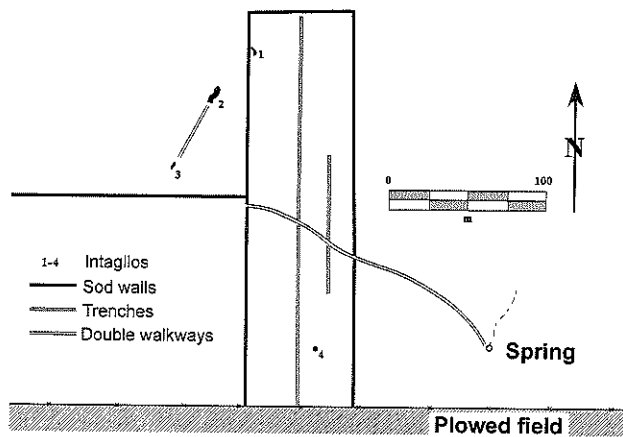


Figure 10.4. Map of the Walter Hutchinson site, Sedgwick County, Kansas. The four intaglios at this site include a possible duck (1), two worm or caterpillar-like figures (2 and 3), and a turtle (4). The walls were formed from piled sod. The two trenches run diagonally with respect to the slope of the ground and are interrupted by causeways where they are crossed by the double walkway.

A type of site that is missing from the Great Bend complex is any form of mortuary site. In fact, purposeful human interments of any sort appear to be absent. There are no cemeteries, no burial mounds, no ossuaries, and no cremations for the many thousands of people who lived in Kansas for centuries, producing the remains that we classify as Great Bend. More than a century of investigation has yielded little more than scraps of human bone, usually from cache pits.

During the massive recent and as-yet-unreported excavations near Arkansas City, the only human remains that were found were some smashed cranial bones in shallow basin features at 14CO1509, modified and unmodified long bones in a pit at 14CO331, and a skull in a pit at 14CO3. In his earlier excavations in the same village cluster, Wedel (1959: 85–86) found fragments of an adult human skull in one pit and scraps of an infant skeleton in another. Neither was complete enough to suggest purposeful burial. In a 1917 dig, Harry Martin (Wedel 1959) and John Sterling found a fully articulated burial in a pit at 14CO3, but gun parts found in the pit fill indicate that the burial is later than the Great Bend occupation of the site.

Farther north, human remains are even scarcer. Rohn and Emerson (1984) report none from their extensive work at Marion, but there are two isolated human mandibles at Wichita State University in a donated collection from the Zyba site. Extensive collections that the senior author has examined from three sites on tributaries of the Smoky Hill River contained no human remains at all. However, Horace Jones reported some human teeth from the council circle at the Hays site, and Wedel found human remains on the floor of a structure in the council circle at the Tobias site (Wedel 1959: 66, 218–222). Susan Vehik (2002b: 39) suggests that the remains are not those of the inhabitants of the site but of enemies sacrificed there.

By the time that the Wichitas were visited by anthropologists, they were burying their dead in individual pits on hilltops (Dorsey 1904: 12). If their ancestors had been doing so during the time that they created the Great Bend sites, many thousands of graves would have been created. There are some hints that there was an earlier pattern of disposal that involved exposing the body on the prairie so that wild animals would consume the body. For instance, Dorsey (1904: 13) reports that “a man injured in fighting would be told not to go into the timber to die, but to go out on the prairie, where the wolves would eat him,” and that if two men were wounded in battle, they were told to stay close enough together that a crow could hop from one body to the other. One of the stories in Dorsey’s compilation of myths mentions a dead woman who was not buried but instead placed on top of the ground (Dorsey 1904: 92). The rationale for this practice may be reflected in another myth in which Thunderbird was restored to life from one shred of flesh still clinging to one of the bones of his hand, “for there was still life in the hand” (Dorsey 1904: 105). Thus, early Wichita mortuary behavior may have been predicated on the belief that any flesh (life) remaining on the bones would prevent the dead person from reaching the afterlife. If the ancestors of the Wichitas placed their dead out on the prairie, not only would we have an explanation for the lack of Great Bend burials, but it would also have interesting implications for the Native American Graves Protection and Repatriation Act.

ARCHITECTURE

Historic sources document a variety of structures for the historic Wichita, including not only houses (Dorsey 1904: 4; Hammond and Rey 1953: 754; Winship 1896: 591) but raised platform granaries, summer arbors (for resting and sleeping during the summer months), corn drying arbors (W. R. Wedel 1982: 19), sleeping arbors (distinguished from summer arbors, as these were used apparently exclusively for young, unmarried women), and sweatlodges (Dorsey 1904: 6). Good evidence of dwellings turned out to be difficult to find because many of the houses were lightly built and had been erected on the ground surface, where the evidence was subsequently plowed away or obscured by later activities at the site. Recent work, however, has documented pit houses, surface houses, and arbors, along with smaller and less easily interpreted structures. Table 10.1 summarizes the structures that have been reported to date.

The measurable house pits average 30 cm in depth, and access to the floor was by ramp or simply via the sloping pit wall. Some pit houses have well-defined wall post patterns, while others do not (e.g., Wedel 1959: 351). Some structures, such as Structure 1 at 14MN328 and House 2 at 14PA307, feature some paired posts in the wall lines (Lees et al. 1989; Monger 1970: 4). Wall posts were not large—the average diameter is less than 10 cm. This contrasts with the granary or work platform supports found at 14CO501, where a square 1.8 m on a side was defined by four posts that averaged 20 cm in diameter.

Table 10.1. Great Bend Architecture

Site	Shape	Type	Size (Meters)	References
<i>Little River Village Cluster</i>				
14RC306	circular	pit house	2.7	Loosle 1991
	circular	pit house	4.0	Loosle 1991
14RC8	circular (?)	surface house	8.0	Lees et al. 1989
	oval	surface house	7.9 x 5.5	Lees et al. 1989
14RC9	oval	surface house	5.5	Lees et al. 1989
<i>Lower Walnut Village Cluster</i>				
14CO2	circular	pit house	3.1	W. R. Wedel 1959
14CO501	square	granary or work platform	1.8	Hawley 1995, 2000
	pair of posts	drying rack (?)	1.8	Hawley 1995, 2000
14CO385	oval	arbor or 2 houses	10.5 x 7.2	Hawley 2000
	oval	arbor	10.7 x 6.9	Stein 2005
	oval	arbor	13.5 x 5.4	Stein 2005
<i>Marion Village Cluster</i>				
14MN328	oval	pit house	2.3 x 3.0	Lees et al. 1989
	oval	arbor	4.6 x 4.0	Lees et al. 1989
	line	rack or screen	2.2	Lees et al. 1989
	line	rack or screen	3.5	Lees et al. 1989
<i>Hunting Camps</i>				
14PA307	oval	arbor	4.5 x 5.5	Monger 1970
	circular	surface house	3.0	Monger 1970
	oval	surface house	3.0 x 4.0	Monger 1970
	circular	surface house	4.9	Monger 1970

Most of the excavated structures contain one or more hearths. For instance, the three structures at 14CO385 that are interpreted as arbors each contained two hearths. When a house contains a single hearth, it usually lies slightly off-center within the structure. This tendency of hearths in Great Bend aspect houses to be off-center may be related to how the structures were built. Because the poles to form the house were pulled together and lashed at the top, there was no possibility of a central hole in the roof to allow smoke to vent. Vent holes were then necessarily placed down the roof/walls, away from the center of the structure (John Reynolds, personal communication, 1994). Sometimes hearths were placed directly on the house floor; others were placed in shallow basins.

Interior features were usually restricted to hearths. At 14PA307, however, Monger (1970) found that three structures contained large posts located near the central hearth, each about 20 cm in diameter. He interpreted them as "crane posts" for internal support of the roof. For instance, House 1, which measured 4.5 m by 5.5 m, contained a central post 18 cm in diameter.

At 14MN328, there were four sets of widely spaced posts, which "may indicate the presence of a bench along the southwest wall" (Lees et al. 1989: 48). The bench would have had a length of around 2.8 m to as much as 4.1 m.

The cache pits in Great Bend aspect sites are often quite large—up to 2.5 m deep. For instance, the sample of pits excavated by Wedel (1959: 229) at the Tobias site had depths below plow zone of from 0.76 to 2.03 m and had storage capacities of 1400 to 7040 liters. This implies a reliance on stored foods that was much greater than is found in earlier sites in the region.

Plowing has erased the evidence of many surface structures in shallowly buried Great Bend aspect components, and this makes analysis of site structure difficult. The lower portions of cache pits usually survive plowing and erosion, however, and clustering of pits is common on Great Bend aspect sites. At 14MN328, however, six storage pits were found in apparent association with Structure 2 (Lees et al. 1989: 52), and it may be that the clustering in other sites is related to the placement of storage pits in proximity to no-longer-visible dwellings. On the other hand, the three oval structures at 14CO385 that are interpreted as arbors are separated by 30 or more meters from intense concentrations of pits (Stein, ed., 2005).

ECONOMY

The Great Bend aspect subsistence economy included a mix of agriculture, hunting, gathering, and fishing. The primary crops were maize, beans, squash, and sunflowers (Adair 1989; Bozarth 1989, 1990; Rohn and Emerson 1984: 189; Wedel 1959: 231). Tobacco was also grown (Adair, personal communication). Gathered foods that have been recovered from sites include walnut, hickory, plum, hackberry, and grape. It is likely that the prairie turnip was important in the diet, but this tuber is seldom preserved in archaeological sites. Greens also would not preserve.

A wide variety of animals was eaten. These appear to have included dogs. In the three sites that Wedel (1959: 233, 304, 329) tested in the Little River focus, dog ranked just behind bison as the most numerous in terms of elements identified. All of the large game animals in the region—bison, elk, deer, and pronghorn—were hunted (Hauray 2005; Rohn and Emerson 1984: 189; Wedel 1959). Medium-sized mammal bones in the collections include all of the species in the region that were normally eaten: muskrat, beaver, otter, raccoon, badger, coyote, wolf, jackrabbit, and cottontail. Smaller mammals, including the larger rodents such as prairie dog, thirteen-lined ground squirrel, and pocket gopher, are also likely to be food remains, but the smaller rodents such as kangaroo rats, moles, and various species of mice do not

appear to be as common as in earlier sites (Blakeslee 1999: 77–85) and thus may not reflect diet. The large water-flotation collections from the Lower Walnut sites that are now being analyzed should clarify which species were regularly used for food.

Bones of various species of reptiles and amphibians along with freshwater mussels may reflect the gathering of these animals for their meat. Both eastern and ornate box turtles, pond terrapins, snapping turtles, soft-shelled turtles, frogs, toads, snakes, and ten species of freshwater mussels are present in the collections. Bones of wild turkey, bobwhite, and possibly sandpiper are found, as well as a wide variety of water birds, including black duck, wood duck, ducks/teals, snow goose, great blue heron, terns, hooded merganser, and the pied-billed grebe. Other birds that may have been taken more for their feathers or other parts than for their meat include the great horned owl, flicker, bald eagle, crow, and raven. Finally, fish remains are also found and include catfish, buffalo, gar, and drum. It is not yet clear how important they were in the diet, but the large Lower Walnut collections now being analyzed should make this clear.

The lithic economy is also interesting. The primary sources of the chipped stone in Great Bend aspect sites appear to be bedrock quarries, as opposed to scattered sources such as upland and riverine gravels. Use of the quarries at Maple City, Kansas, and Hardy, Oklahoma, has already been mentioned. Other lithic types commonly found in at least some Great Bend aspect sites include Smoky Hill jasper from northwestern Kansas, Alibates agatized dolomite from the panhandle of Texas, the gray Permian-age cherts from the Flint Hills, and Mississippian cherts from the Ozark uplift. Acquisition of these types of stone may have been embedded in long-distance hunts, as demonstrated by Holen (1991) for Lower Loup sites in Nebraska (cf. Blakeslee, Peck, and Dorsey 2001). Nearby sources not present in large amounts include Florence D chert from the northern Flint Hills, Nehawka chert from southeastern Nebraska, and Winterset chert from the Kansas City locality. Zehnder (1998) analyzed the chipped-stone debitage from two Little River focus sites to show that these people drew their stone from two very different regions. The lithics from one of them, the Sharps Creek site (14MP301), match nicely with the pattern present in sites at Marion (Rohn and Emerson 1984; Roper 2000b). Zehnder's work suggests strongly that Wedel's Little River focus will have to be revised and that the sites on tributaries of the Smoky Hill should be separate from at least some of those along the tributaries of the Arkansas River. The lithic sources that dominate the various village assemblages suggest the pattern of band territories illustrated in Figure 10.5.

Raw material from the various quarries was carried to Great Bend aspect sites in several forms. Rohn and Emerson (1984: 150–151) report the presence of large biface blanks in Marion sites, at least one of which appears to have shattered during heat-treatment in the village. Bifacial blanks have also been found in a pit at the Lower Walnut Radio Lane (14CO385) site, while similarly heat-shattered and unheated blanks have been recovered from the surface of the Maple City quarry (14CO5) (Gould 1898b, 1899; Hawley and Haury 1994; Reynolds, Reed, and Jackson 2001).

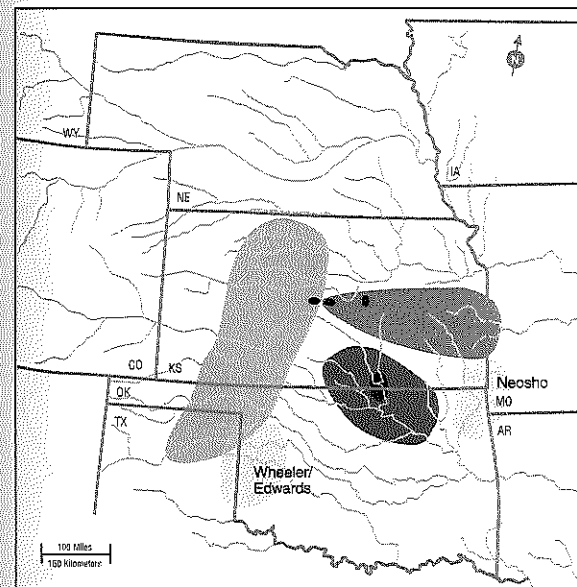


Figure 10.5. Approximate band territories suggested by analysis of the sources of the lithic materials found in Great Bend village sites. Darker shading indicates village clusters.

Rohn and Emerson report some large percussion flakes that apparently were also blanks. These very large flakes appear to have been detached from the core with a hard hammer, subsequent to which the thick bulbs of percussion were reduced with a soft hammer, apparently to allow them to pack better for transport. Another form of quarry blank is represented by true blades struck from polyhedral cores.

Glacial drift in the northeastern corner of Kansas was another important source of stone for pecked- or groundstone implements. Cobbles of Sioux quartzite were fashioned into mauls, and Kansas pipestone (not true catlinite) was obtained for pipe making. Some of the quartzite cobbles used for hammerstones may also come from this source, as well as from riverine gravels. The Dakota sandstone from the Smoky Hills region was used for arrow shaft smoothers and for other abraders. Limestone for milling stones and manos probably derives from a variety of sources.

Exchange was the source of a variety of exotic goods, and exchange with the puebloan peoples of the Southwest was especially important. Southwestern pottery, New Mexico obsidian, occasional pieces of turquoise, southwestern-style shaft straighteners and tubular pipes, and Olivella shell beads all derive from this source (Hawley 2000). Occasional sherds of Lower Loup and Caddoan pottery also occur in Great Bend aspect sites (Perttula, Hawley, and Scott 2001; Roper 2000d).

MATERIAL CULTURE

Great Bend aspect ceramics consist almost entirely of utilitarian wares, most of which were formed by the paddle and anvil technique. Also present are a few miniatures

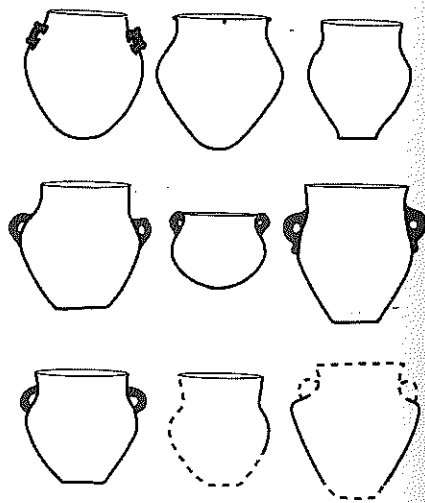


Figure 10.6. Typical Great Bend vessel shapes. Top row: Little River. Middle row: Lower Walnut. Bottom row: Marion (after W. R. Wedel 1959; Rohn and Emerson 1984).

formed by pinching. The most common vessel form is an amphora-shaped jar, the maximum diameter of which is usually above mid-height. The rims are fairly tall and vertical to slightly flaring (Figure 10.6). Both flat and convex bases occur. Also present are deep bowls that have lower rims and convex bases.

A few bottle forms are present in the Paint Creek site. Those that the senior author has examined are unique in several ways. They have a red slip that appears to have been applied after an initial firing of the vessel. The vessel was then fired a second time. They also feature loop handles that were oriented horizontally rather than vertically as on the jars. Analyses of the vessels' clay pastes are needed to determine whether they are trade items or of local origin. Vessel form, surface treatment, and temper type vary among the three main village clusters. Shell temper dominates Lower Walnut assemblages, surfaces are usually smoothed, and flat bases are common. In Little River sites, sand is the most common temper type, flat bases are rare, and simple-stamped surfaces occur. The sites near Marion have both shell and sand temper, some simple-stamping, and more flat bases than the Little River sites. A few cord-marked vessels occur in both the Little River and Marion sites. Jars frequently sport a pair of loop handles, as do a few deep bowls. On the jars, the handles are usually placed at the base of the rim. The handles are attached by riveting. Decoration is rare, especially below the rim. Incised and punctate decoration is usually restricted to the lip and handles, but appliqué nodes and fillets (some of which are incised) occur on upper rim exteriors.

Great Bend aspect arrowpoints are small and triangular, both with and without side notches. They usually have slightly convex blade edges and straight to concave bases. Many exhibit portions of the original flake scar on one or both faces. Three basic forms of knives are present. Some are plain ovate specimens. Others are stemmed or hafted, and on these the long blade edges usually exhibit alternate bevel-

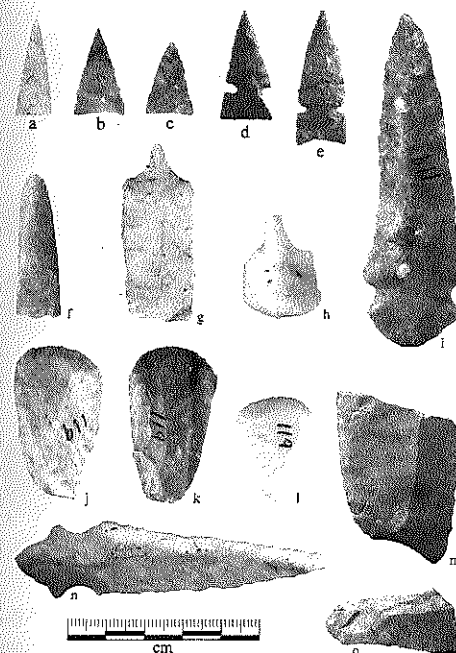


Figure 10.7. Typical Great Bend chipped-stone artifacts. Points, a-e; pipe drill bit, f; stone awls, g, h; hafted beveled knives, i, n; endscrapers, j-l; blade fragments m, o.

ing (Figure 10.7). The third form, what Rohn and Emerson called Marion blade knives, consists of blades that most often are unifacially worked on one edge only.

Endscrapers are common. They are usually small and triangular to teardrop-shaped. The lateral edges are usually carefully straightened and smoothed, and the proximal ends are usually fairly thin. When more than one is present in a site, they are readily distinguished from assemblages from all earlier archaeological units in the region.

Drills are also common, and they come in several forms. The large, straight, double-ended drills are the most distinctive. The ends of used-up or broken beveled knives were also used as drills. Pipestone dust still adhering to some specimens demonstrates that both forms were used to drill stone pipes. Other smaller perforators that probably functioned as stone awls are also common, and these often have an expanding stem. Most of the smaller specimens do not have a thick cross section and hence probably did not function as drills. Instead they may have been used as stone awls to perforate the edges of hides so that they could be stretched for drying and scraping. Choppers and other heavy bifaces are frequently present. They include a tool type distinctive to Great Bend aspect sites. These have the form of choppers and have heavily battered edges. In fact, the edges on some are so blunted that they appear to have been used as hard hammers. These tools may have been used to re-grout the surfaces of milling stones that had become slick from wear.

Groundstone artifacts include elbow pipes with very tall bowls (Figure 10.8). This form of pipe was usually fashioned from Kansas pipestone to form an angle of

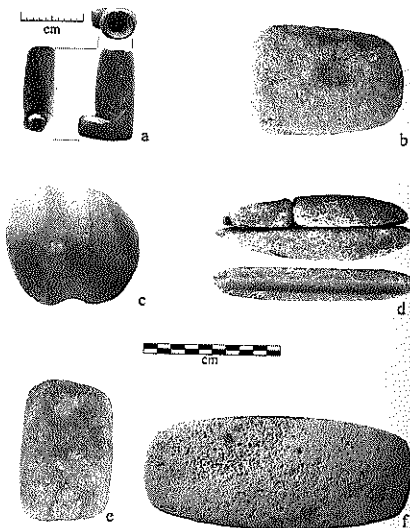


Figure 10.8. Typical Great Bend groundstone artifacts. Miniature pipe, a; nutting stone, b; round-headed maul, c; arrow shaft smoothers, d; manos, e, f.

slightly less than 90 degrees. Also present in large numbers are stone mauls (e.g., Wedel 1959: 276–280). These occur in two forms, those with flat ends and those on which the ends are quite convex. Apparently, the two forms of maul were used for very different purposes. Manos long enough to have been held in both hands and heavy grinding slabs are common. The pipes and milling stones are rare in earlier sites in Kansas. Other groundstone tools, such as arrow shaft smoothers and hammerstones, are not as distinctive.

Artifacts of bone, antler, and shell are also common in Great Bend aspect sites (Figure 10.9). Ubiquitous in the village sites are bison scapula hoes, hafted by a variety of techniques (Wedel 1959: 251, 365). Also made from bison scapulae, and often from broken hoes, are more or less triangular tools that functioned either as squash knives or digging tools (Rohn and Emerson 1984: 172–173). Another agricultural tool, digging stick tips made from the tibias of bison, are common in the Cowley County sites. Flaking tools, arrowpoints, shaft wrenches, and bone and antler endscraper handles are all found. Animal bone was also used to make hide grainers, beamers, awls, beads, and pendants. Some scored pieces of bison rib may have functioned as musical rasps; others may have been used to create simple stamping on pottery. Mussel shell was used primarily for making beads and pendants, but at least one hafted shell knife has been recovered from a Great Bend aspect site.

European goods show up in small numbers in some Great Bend aspect sites. Spanish chain mail (Terry and Terry 1961; Udden 1900; Wedel 1975) has drawn the most attention, but an axe head, glass beads, and beads of copper or brass are also present. Most of these materials appear to derive from the Spanish, as befits the early historic age of the sites.

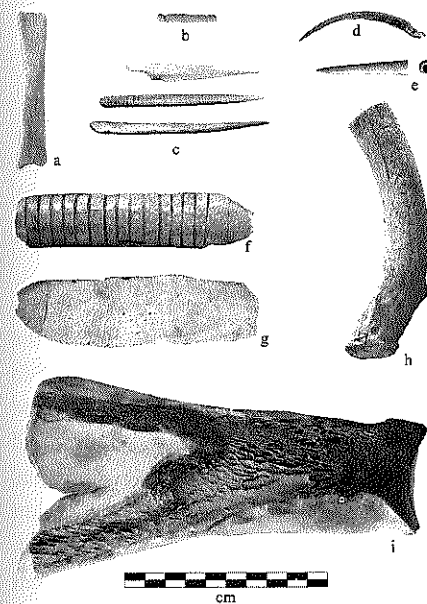


Figure 10.9. Typical Great Bend bone artifacts. Polished bison hyoid, a; pendant, b; awls, c; beaver incisor chisel, d; antler arrowpoint, e; bison rib rasp, f; knife, g; antler billet, h; scapula hoe, i.

CURRENT WORK AND FUTURE PROSPECTS

Work on Great Bend aspect archaeology continues. Susan Vehik (2002a, 2002b) has reanalyzed some of Wedel's data, examining them for evidence of status differences. Michelle Peck (2003) compiled a summary of Great Bend aspect hunting camps. Other work needs to be done. Zehnder's (1998) thesis points to the need for a revision of Wedel's Little River focus that recognizes the use of different territories by individual villages. No one has yet addressed in any detail the relationship of Great Bend aspect to the contemporary Neosho phase of northeastern Oklahoma and southwestern Missouri or to the Wheeler/Edwards complex of western Oklahoma. More work also needs to be done on the origins of the Great Bend aspect (Roper, chapter 7, this volume; S. C. Vehik 1976; Wedel 1968). A basic problem here is that so little is known of the Bluff Creek, Pratt, and Uncas complexes that preceded the Great Bend aspect in the southern half of Kansas (see chapter 11, this volume). Much more work is also needed on the demise of the Great Bend aspect and the transformations generated by increasing European contact (cf. Bell, Jelks, and Newcomb 1967; Odell 2002; S. C. Vehik, chapter 12, this volume; Wedel 1981). Finally, there are unanalyzed collections awaiting study. Zehnder looked only at the lithic debitage from two of the Kansas Archeology Training Program excavations; there are seven such collections that contain the full range of ceramic, lithic, and other artifacts, along with houses and other features.