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Contents

Reminiscences of Plains Archeology, Pre and Post World War II
by Ralph Solecki

Additional Notes on Loren Eiseley's Years at the University of Kansas
by Marlin F. Hawley

From Southeastern Kansas to Northwestern Missouri: Recent Archeological Investigations by the Saint Joseph Museum
by Jim D. Feagins

Kansas Folsom Evidence
by Jack L. Hofman

The KANSAS Anthropologist
Journal of the Kansas Anthropological Association

KANSAS ANTHROPOLOGICAL ASSOCIATION

The Kansas Anthropological Association is the oldest amateur archeological organization in the state. Its membership is made up of individuals and institutions interested in the prehistoric and historic peoples of the area. The objectives and goals of the Association are the preservation and interpretation of archeological and ethnographic remains within the state; the scientific study, investigation, and interpretation of archeological remains and ethnographical materials; the publication and distribution of information concerning Kansas archeology and ethnology; and the development and promotion of a greater public interest and appreciation for the heritage of the state.

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CONTENTS

Reminiscences of Plains Archeology, Pre and Post World War II ..... Ralph Solecki 1

Additional Notes on Loren Eiseley's Years at the Univeristy of Kansas .. Marlin F. Hawley 17

From Southeastern Kansas to Northwestern Missouri:
Recent Archeological Investigations by the Saint Joseph Museum ..... Jim D. Feagins 23

Kansas Folsom Evidence ..... Jack L. Hofman 31

Book Review 44

About the Authors 45

1994 Kansas Anthropological Association Members 47

REMINISCENCES OF PLAINS ARCHEOLOGY, PRE AND POST WORLD WAR II

Ralph Solecki
Texas A&M University

The Kansas Anthropologist 15(2), 1994, pp. 1-16

The author compares his field experiences in the Plains area, first as a student with Works Progress Administration-directed excavations before World War II and later as a field archeologist with the River Basin Surveys, Smithsonian Institution. The late 1930's work essentially focused on selected archeological sites of high promise, giving employment to out-of-work farmers and townspeople. The 1950's campaigns, also federally supported, on the other hand focused on sites endagered by dam construction and flood control projects in the Missouri Basin.

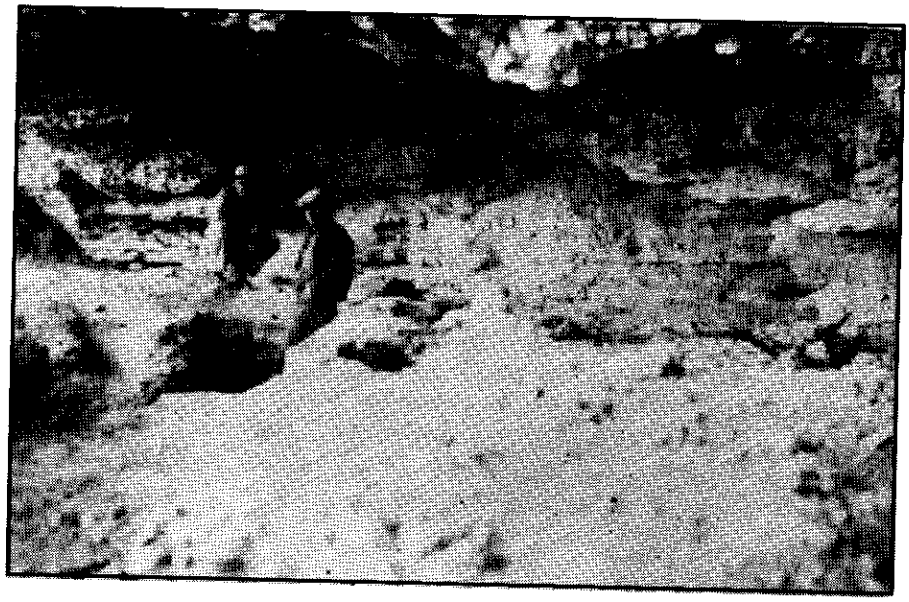
In my three early field seasons in the Plains, I had worked only in Nebraska. The summer of 1939 was with Carlyle Shreve Smith, the summer of 1940 was with Robert Cumming, Jr., and in 1941 I worked under Marvin (Gus) C. Kivett. I returned to the Plains for a season 11 years later in 1952, this time under the auspices of the Smithsonian's River Basin Surveys Program.

My introduction to Plains archeology was foreordained through my Long Island friend Carlyle Smith. He was a student of William Duncan Strong, whose *An Introduction to Nebraska Archaeology* became the bible of pre-World War II Plains archeologists. After World War II, when I enrolled in the graduate program at Columbia University, I had the pleasure of taking Dunc's North American course, which naturally dealt heavily with the Plains in enthralling detail.

My first trip west in the summer of 1939 was a tremendous experience. I joined Carlyle Smith at Wauneta, Nebraska, stepping off a tired old red bus on the last leg of a non-stop trip from New York, changing vehicles on the way. Alighting from the bus early in the morning, tired and sleepy, I saw chickens dusting themselves on the street, dogs, and wide open streets. Carlyle was a welcome greeting sight. We went straight to Ash Hollow Cave on the North Platte River, where John Champe was excavating. This was my first cave excavation, something we did not have on Long Island, and nothing like Long Island archeology. We excavated the archeological deposits in 3-inch levels. I am not sure how the sequence of deposition was resolved, because arbitrary sectioning produces headaches for the person researching the stratigraphy and trying to assemble the cultural material.

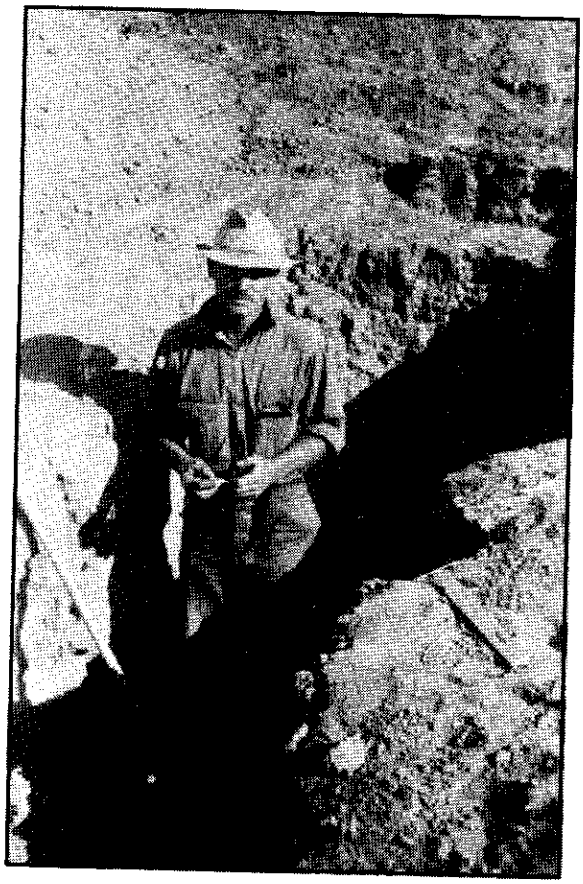
The full realization that I was out in the Real West came when we went to see the wagon wheel ruts cut into the sod on the Oregon Trail nearby. We visited the 100-year-old grave markers and Windlass Hill, where the wagons were let down into the valley. I learned that the Platte was very much unlike the Hudson. It was said to be a mile wide and a foot deep. We slept in the cave on cots in a complete silence new to me, punctuated by the nocturnal yaps of coyotes, another novelty.

The most impressive thing about the Plains is the vastness of the area. It was like looking over the sea, miles of wheat fields bowing under the wind. Coming from waterbound eastern Long Island, the Plains represented a marked contrast. One of the things that thrilled me was standing on one of the hills in Nebraska, looking downriver, and seeing the weather coming up the valley. Dark thunder clouds would come boiling up from a far distance, while there was clear blue sky above. At other times in the summer heat, there were dust devils dancing over the fields. The local farmers spoke about the dangers of tornadoes--also new to me.



Moss Fletcher and George Metcalf inside Ash Hollow Cave, Nebraska, 1939.

Carlyle Shreve Smith measuring depth of crack in bluff above Davis Creek at site GY-4, Nebraska, 1941.



George Metcalf in excavation at site NA-1, Fullerton, Nebraska, 1941.

At a site on Davis Creek near Genoa, Nebraska, I saw my first flash flood and what it could do. The creek, steeply banked in an erosional gully, was normally a moderate slow flowing stream. Since the trees growing along the stream provided some shade and it was considerably cooler by the stream bank, we had been using niches cut into the earth bank for food storage. On this particular day we had stored a couple dozen fresh eggs and other fresh produce, which had been brought to us by one of our local farmer neighbors. While the sky was serenely blue overhead, we noted some storm clouds upstream way off in the distance with adistant rumbling. We secured our tents as a precaution and went to bed for the night. We appeared to be out of the weather, however. In the morning we were called out to see what had happened to little Davis Creek. The banks were almost overflowing with an angry chocolate-colored rampaging flood, fully 10 feet in depth, yet we had no rain. Gone was any vestige of our egg cache and other things put away for cool storage.

It was at Ash Hollow that I met A. T. Hill and George Metcalf for the first time. In subsequent years George's and my paths crossed on a number of occasions, the last time in Washington, D.C., where he was working in the U.S. National Museum. He told very many stories about the West and himself. One of the most touching tales was of his survival during the depths of the depression years. He said that on occasion when he was thoroughly broke, in order to get nutrition, he would go into a local cafe, order a mug of coffee for five cents, then garner the sugar bowls and the milk jug. He would pour sugar into the coffee, making it as it as sweet as he could stand, then sip and keep adding milk as the coffee level went down. By the time he finished drinking the coffee, he had consumed a goodly amount of sugar and milk, staving off hunger somewhat. In the field on excavation sites, where in the absence of a cook we had to fend for ourselves, George introduced me to his standby of Kraft cheese, which came in a narrow wooden box, and raisin combination, eaten between bread slices, topped off with coffee--no milk.

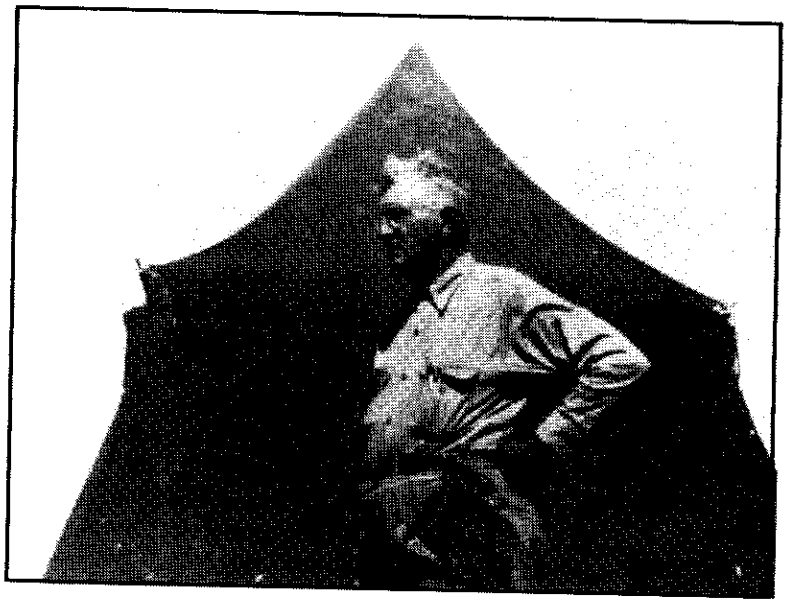
Besides their love of Plains archeology, Duncan Strong and George Metcalf had another thing in common. Both had missing fingers on one of their hands, lost through accidental gunshot wounds. The loss of the fingers had impressed one of my fellow students very much. He wondered if it was usual for archeologists to lose fingers in their chosen profession. I found him covertly examining the hands of visiting archeologists.

Although George had really worked as a cowboy, he would rarely admit it. You would not know it by his clothes, but he had a somewhat rolling gait. He always wore a slouch cap, which I thought was odd for a westerner. Carlyle Smith, on the other hand, bought himself a Stetson and carried his .45 caliber six shooter with him in the field, sometimes strapped onto the steering wheel of his Model A Ford. He showed us his marksmanship by potting floating cans in the pond below the Ash Hollow Cave.

After a couple of weeks at Ash Hollow Cave, we broke camp and moved to central Nebraska to our next excavation site. Our car caravan eastward was made up of three or four vehicles. I drove a 1930 Buick, which A. T. Hill must have rescued from the junkyard. One of the door windows kept falling out when I closed the door. Economy was the watchword, and we slept on cots by the road side. Our tinned food, pork and beans, was heated on the exhaust manifold under the hood for a few minutes as we drove.

The archeological excavation in central Nebraska was a Works Project Administration (WPA) project, which Carlyle was directing. There was another unpaid student assistant, Moss Fletcher, with us. We shed our shirts in order to get a suntan, as students would do. The depression-age farmers and other similarly unemployed townsmen who worked on the project very sensibly wore their long sleeved shirts and bib overalls. The men carried files in their back pockets, which was a cause for wonderment to me. The use of this instrument was made known to me later. The men's heads were suitably hatted with sweaty fedoras or straw hats. Carlyle wore his big western hat.

The project consisted of opening up earthlodge sites, which I was told belonged to the Upper Republican culture. The local name



A. T. Hill in camp at site PT-13, Monroe, Nebraska, 1941.

Excavating an earthlodge on site GY-2, Nebraska, 1939. A. T. Hill supervising workmen from the camp stool. Moss Fletcher, without shirt, on the shovel.

for the earthlodge depressions was "buffalo wallows." Indeed, some of them could have been depressions that bison did habituate. Since the depressions were the first to fill with water during rains, they were marked by taller and greener verdure. Also, during the drier months, the earthlodge depressions would be the last areas to suffer the dryness.

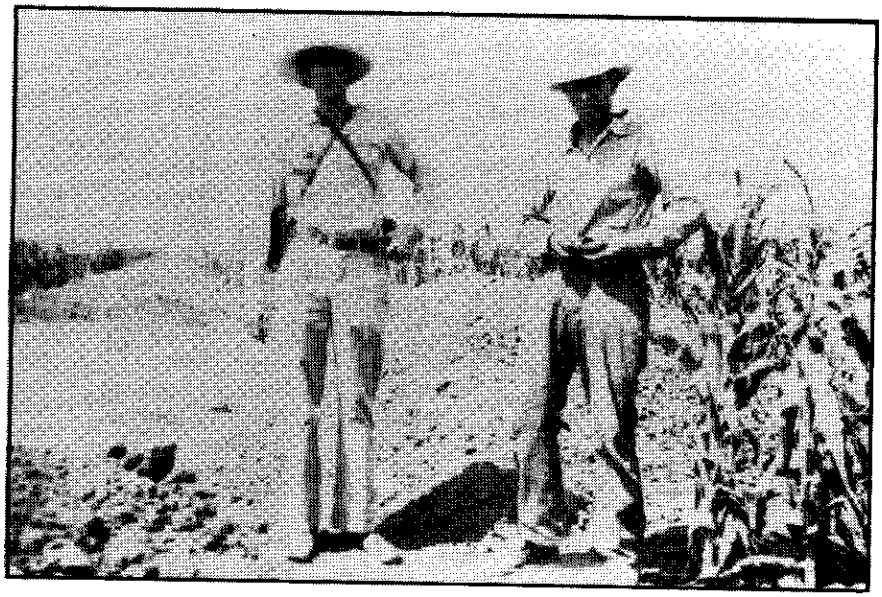
Strong's Nebraska archeology book was our guide, and A. T. Hill was our advisor. Carlyle's first excavation of an Indian earthlodge in Nebraska was done contrary to the local custom of exposing round houses. He employed the men in stripping off arbitrary levels of soil in 5-foot squares, in the accepted archeological practice, running across the site in 5-foot-wide strips. Two problems immediately emerged: the levels of the squares in the adjoining strips never quite matched, and in the final excavation the excavated rectangular strips extended well beyond the limits of the curvate outline of the earthlodge. This is where A. T. Hill stepped in, and by example he very neatly and economically exposed another earthlodge, following what appeared to be the accepted Plains practice. But it seemed to me that by concentrating on the more obvious features, namely the sunken earthlodge sites, we were missing evidences of cultural signs among the circles. Qualification of this observation has to be made, however. At least on a couple of sites, broad areas among the earthlodge sites were opened up, and the soil was cleaned down to the yellow sterile subsoil.

There was one occasion when A. T. Hill was supervising the excavation of a depressed circular area, which gave all the appearance of an earthlodge. He seated himself on a canvas-bottomed camp stool on the edge of the excavation with a good supply of cigars and gave directions. Consternation grew when the central firepit could not be found. Instead there was a large shallow pit, possibly a storage pit. Further exposure through the sod resulted in finding no trace of postholes. Instead there appeared more large shallow cavities. All these were duly excavated. A. T. fretted with the passing hour. Evidencing his puzzlement and chagrin was a half moon stain around his seat of brown tobacco spit, punctuated by the pokes of his cane in the ground.

As mentioned earlier, I met A. T. Hill for the first time at Ash Hollow Cave. He lived in a trailer home, parked in a field nearby. This trailer home was pulled by a fairly new green four-door Plymouth. A. T. and his trailer house were present at archeological sites where I dug in Nebraska during the seasons of 1939, 1940, and 1941. I was called "Pohuski" by A. T., and he paid me $20 out of the blue for drawing field sketches of the terrain. I spent $8 out of this amount, hitchhiking from Nebraska to New York, via Galveston, Texas, to Jacksonville, Florida, and north. Lodging was generally about 50 cents per night.

A. T. Hill, who had owned a Buick dealership, as I recall, was an avid avocational archeologist, and he left his stamp on Plains archeology. His presence was felt everywhere, it seemed. A. T. exhibited his understanding of the ways of the prehistoric Indians by predicting the construction features of the earthlodge sites and how to locate the house posts without random excavation. His trick was to employ a long string and several sticks. This was undoubtedly what the Plains Indians used in the architecture of their impressive earthlodges. In the excavation of the earthlodge, he first located the entryway, which generally faced to the south and east, as I remember. That done, he located the central firepit in the center of the depression, extending the string out to the visible evidence in the turf of the outer perimeter of the earthlodge. A. T. had some kind of simple formula in mind to locate one of the four main posts. These were always positioned in a kind of square with the firepit in the center. The workmen would skin the sod off the earthlodge, beginning at the central fireplace and working toward the four main posts. When exposed, the post molds looked like round wastebasket-sized dark circles, which showed up very distinctly in the yellow loam. Sticks would be thrust into the stains to mark them for later excavation.

Storage pits, some of them at least 9 feet deep, were exposed in the earthlodge floor. These were marked as ca. 3-foot diameter circles of dark mixed earth, contrasting with the sterile yellow loam. The pits were generally bell-shaped in cross section and capacious in shape. I was given the task of excavating a number of these. Excavating storage pits proved to be a



Robert Cumming, Jr., and Matt Schreiner in Nebraska, 1940 season.

Marvin (Gus) Kivett, Nebraska, 1941 season.

very agreeable task because I found myself enclosed in a cool environment, a relief from the summer heat, digging in nice soft black earth. In hindsight we lost a lot of information because we should have washed the sediment for all organic traces, such as seeds, etc. No one knew anything about palynology, and an opportunity to recover vegetal data was lost as well. We made schematic section drawings of the pits, detailing the diameters of the openings and the depths and general outline shapes of the pits, and we identified and listed the pit contents.

In Nebraska I had my first experience with "carpet" excavation. This was a digging process in which a large area was stripped of overburden down to the first appearance of the ancient living surface and the subsoil. After the preliminary staking out of the area was done, the technique involved lining up the workmen at one end of the proposed exposure. The workmen then took comfortable bits of the overlying turf down to a depth of about 6 to 8 inches with their shovels. This dirt was heaved onto a heap behind them. As they excavated across a front, heaves of dirt became long, and the piles grew higher. The old workhorse of archeological excavation, the wheelbarrow, was called in for the dirt removal. The back pile of dirt frequently had to be moved because it was found to lie over an area that was wanted for investigation. This was no problem because the time the men spent in manually shifting the spoils heap gave the archeologists time to write up their field observations and to check any archeological features exposed in the first "run." Sometimes an arrangement was made with a local farmer to bring in a horse-drawn scoop for the backdirt removal. This simple affair left no heavy wheel tracks, made no noise, and proved to be very versatile in its utility. Sometimes the horse expelled gas or defecated while at work, but this was no problem because the scoop was right behind it. An experienced hand with a good horse could perform intricate systems of soil disposal.

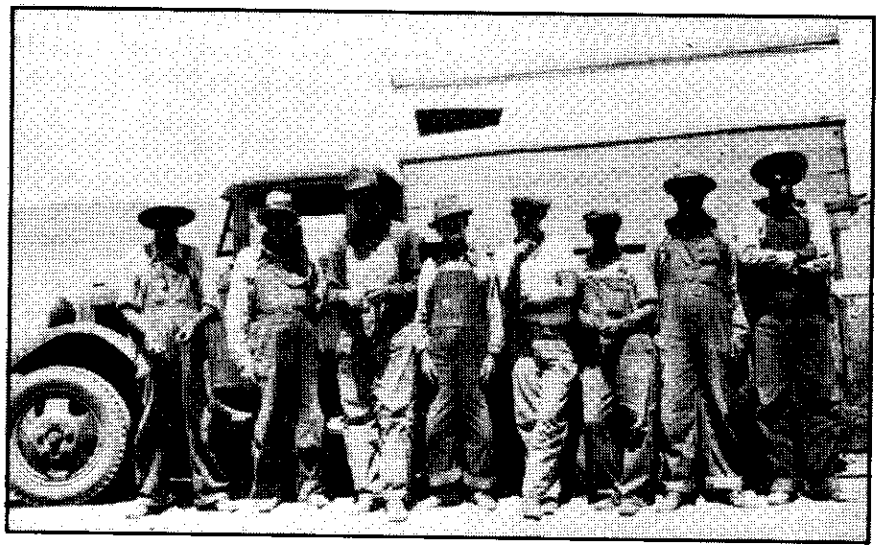
To answer my question of whether any archeological materials were lost in the shovel excavation, a sieve was set up by the side of the dirt pile, and all of the excavated earthlodge dirt was put through it. As I remember, the total finds in this particular case consisted of something like three projectile points only, and these could have been brought up by gophers or other agency from the underlying floor area.

The second level of shovel bites was more critical, since it came close to the actual earthlodge floor. Care was taken not to cut into the subsoil, which was generally a light muddy brown or tan color. The luxury of inflatable rubber tires on the wheelbarrows had not yet been introduced, and the iron wheels made crisscrosses on the finished excavation floor. We took pains to erase these marks as best we could for the photography.

Varying with the wishes of the supervising archeologist, the earthlodge site might be sectioned into four quadrants with a crossing of profiles. This was done in order to get a record of the character and disposition of the sediment.

After the earthlodge floor was nicely scraped down and cleaned up, exposing the central hearth, the main central posts, the storage pits, and the encircling wall post molds, the next job was the mapping. It was simplicity itself and needed only an elementary knowledge of the surveying art. It was done with an open sight alidade and straight ruler combination, a plane table, an iron surveying pin, and a long cloth (we did not have steel) measuring tape. The table was centered over the central hearth, and a straight pin was stuck in the map paper in line with the middle of the hearth as a reference point. The metal loop on the end of the tape was held down by the surveyor's pin. The assistant held the tape down at the middle of the various features, reading off the measurements to the instrument man. Using the scale on the alidade, the instrument man plotted in the measurements. In a short time, a matter of perhaps an hour, all of the features were shot and drawn in on the map. Sometimes there was a unique feature, such as a horned bison skull opposite the hearth at the rear of the earthlodge, which took a little more time to draw in.

The files, stuck in the back overall pockets of the workmen, were explained when I observed the workmen halt their digging in order to sharpen their shovels. Continual sharpening reduced the curved shovel bits to spade bits that were quite sharp. The digging stance in skinning



WPA workmen with their transport, Nebraska, 1940.

away the soil and exposing the post molds and pit outlines was new to me. Each workman dug in a kind of crouch, putting one leg in front of the other. On the knee of the forward positioned leg (or about that area), the workman positioned his shovel, holding it firmly with one hand against his leg. This gave him a fine control of his shovel, whose bit was held at a low oblique angle (ca. 35° to 40°) to the earthlodge floor. Exerting pressure on the forward leg transmitted pressure to the shovel bit, and this cut into the loam. In this manner a thin 7- to 8-inch-wide slice of the earthlodge floor was peeled away. It was like using a cutter for shaving hard cheese. With a well sharpened shovel bit, an experienced shovel man with wonderful control could peel away varying thicknesses of the loamy soil as wanted. In this manner the outlines of post molds and pits could be cleanly cut in sharp outline. To remove the dark mixed overburden and humus, the men wielded their shovels in the usual vertical digging manner. They cut away the sod inches at a time. No screening was done. Actually, carefully following the clearing of the sod overburden, I found relatively few artifacts.

The archeologists carried their trowels in the small of their backs, thrust through the belt, where it was out of the way, but could be brought into use in an instant. Some, like Smith, carried a sheath knife to mark post molds and pit outlines.

Looking back, the WPA workmen must have been desperately poor. They arrived at the dig in an open truck and ploddingly worked moving dirt all day long. None of them ever invited us to their homes; ours was purely a business relationship. However, through daily association we did learn something about them. Contrary to what I expected, they were not people of old American-English stock. Instead they represented a much newer cross section of Europe, including Scandinavian, German, and other central European descent. The workmen were all family men, providers. This was very evident from their conversation. I did not have much in common with them and consequently was left out of discussions. I was much younger, without family responsibilities. They spoke about local family matters, the prices of goods, clothing, gasoline, etc. A matter of some debate was moving out of the area to a reported better economic region. The "coast" was frequently mentioned. It did not dawn on me until later that they were talking about the West Coast, whereas I thought they meant the Atlantic Coast. Some of the younger men were set on packing up their families and leaving for Oregon or Washington State to join friends or families already there.

For diversion from camp life, the archeologists went to town at least twice a week. One of these times was Wednesday night, when the storekeepers put on an open air movie show

in town to attract patrons to their stores. A big white sheet was draped across the side of a building facing an empty lot, and a portable movie projector loaded with black and white 35-mm film was brought in. The seats were simple planks set upon strong wooden boxes or milk crates. The farmers would come in with their families, all simply togged out in freshly washed everyday clothes. While the children went to the movies or elsewhere for their fun, the parents either sat in their cars to receive visitors or walked from car to car to greet their friends and gossip. All of the stores were open, so the merchants profited from mid-week shopping. The same went on each Saturday night, but it was more crowded. By contrast, Sunday, as a day of rest, was marked by wide open empty streets, with listless dogs and chickens scratching in the dust, sometimes the sole creatures in evidence.

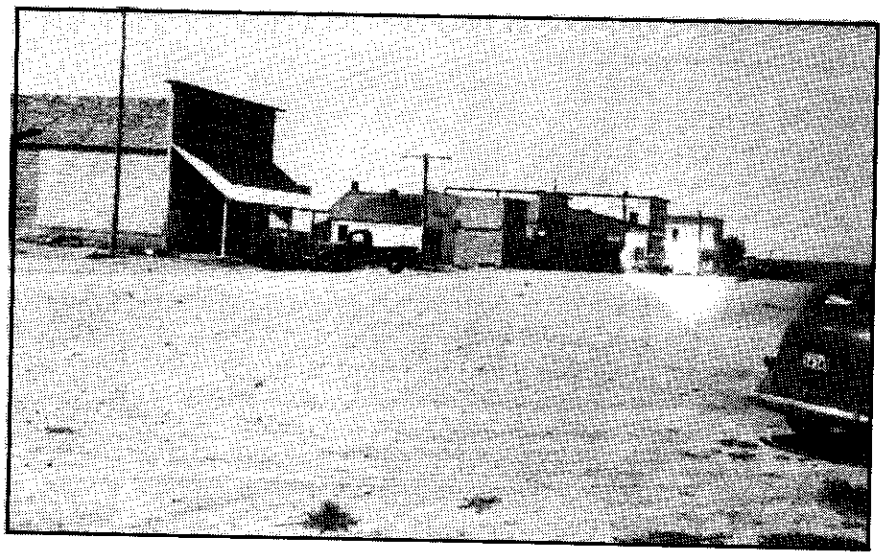
I learned early that travel in the open country by car was seldom from point to point as the crow flies. One had to constantly change direction 90 degrees left or right in conformance with the section lines. A compass on the dash kept you oriented for north, south, east, or west. Traveling at speed over the dusty gravel roads with their washboard surfaces proved to be both a challenge and a hazard to drivers. One was never sure when the windshield or lights would be struck by pebbles from oncoming vehicles. Through experimentation with different speeds, I soon discovered that keeping a steady 45 mph minimized the bumps to a dull rumble. The subject of washboard roads and speeds was dealt with very scientifically in an article in *Scientific American* (Mather 1963) some years back.

Camp food was generally soggy white store-bought bread in glazed paper wrapping, pork and beans, cheese, and coffee. There was no such thing as a "hearty" breakfast, and lunch was a help-yourself affair. We were more than happy when the local farmers, to be neighborly, befriended us with an occasional basket lunch. I suspect that A. T. Hill footed the bill for such repasts.

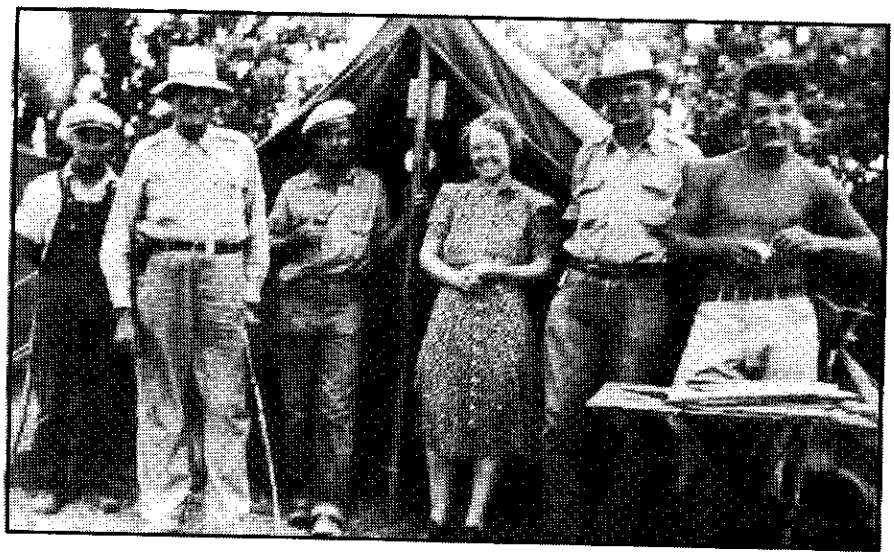
The wheat threshing season was a memorable happening. The archeologists pitched in to move the wheat through the threshing machine. I think that I always got the pitch fork to heave the straw in 100-degree heat. Stripped to the waist, we became covered with sweat and dust. A quick dip in the creek washed away most of it. After an additional soaping down, we emerged bright and clean, ready for the sumptuous meal the women of the farms laid out for us on trestle tables. There were roasted chickens, fresh vegetables, wonderful home baked bread, deliciously turned baked potatoes, and gravy, finished off with nice hot pies and coffee.

Since we were working on a Works Project Administration project of the Roosevelt presidency, the idea was to use the labor of unemployed men in the country. The object of the WPA, it seemed to me, was to give unemployed men something to do, productive, yet not expensive of equipment and resources. Archeological projects did not compete with industry, and since one could engage large groups of men at a time in depressed farm lands, some bright light in Washington thought that excavating Indian sites was an ideal solution.

Duncan Strong told me that he was given 200 workmen on his first day of excavating a mound in Tennessee. Some of these men had never handled a shovel in their lives. On the first day 10 shovels were broken. Carl F. Miller, my Washington colleague, told me that he had to tidy up excavations on his mound site into the night by flashlight. The only mechanized equipment I ever saw in my three seasons in the Plains was a horse-drawn scraper. This was used to move excavated dirt from one pile to another, generally farther away. When the archeologists were busy on the site taking measurements or doing other tasks that took all of their attention, it did not look right to have the workmen standing idle. Therefore, they would be put to the task of moving an old dirt pile to another place, shovel load by shovel load. The horse-drawn scraper had to be contracted for and was not readily available when use was found for it. Sometimes the dirt pile was inadvertently placed just on the spot that the archeologists later wanted to excavate. This was no problem, because one or all of the workmen (whoever was free) could be detailed to do the moving. Labor was always available, and the men did not mind because it made no difference to them. They spent their day digging, whether fresh or old



Mission, South Dakota, a town on an Indian reservation, 1939. Smithsonian Institution photograph.



Lee Madison, A. T. Hill, George Metcalf, Minnie (the regional WPA director), Carlyle Smith, and Ralph Solecki, 1939.

dirt. During the summer, when the sun was broiling hot, we were given salt tablets with water regularly to forestall heat prostration. The men, however, did not over exert themselves and went about their business quite normally. They would frequently lean on their shovels in a pause to make a point in their continual conversation.

One site (25HW3) stands out in my memory. It was a hilltop Indian burial site, where I was given the task of exhuming the skeletons. The cemetery area had been infested with badgers, whose holes could be traced interlacing the burial pits. Recording the position of the burials was made difficult by the fact that the animals frequently dragged away the long bones into their holes, resulting in disturbances of the burial remains. Between the camp and the hilltop burial place were two or three barbed wire fences. Since a downhill trip was an invitation to run down, I used to run downhill taking the fences like a hurdler. At this site we had

exposed some 60 Indian skeletons. This fact made the headlines in the local newspapers. The following weekend, there was an estimated crowd of 2,000 people, men, women and children, who made a holiday excursion to see the Indian burials on the hill. Cars drove up the hill as far as they could make it. About halfway up, some very enterprising vendor set up a soft drink stand, where he also sold some kind of snacks and hot dogs, as I recall. Families spread covers on the grass and made themselves a picnic holiday. We had to stand around the excavation to be certain that someone did not get too close to the edge and fall into the pit. Carlyle Smith or George Metcalf became the resident lecturer on occasion.

In the 1939 season Smith and Metcalf took Moss Fletcher and me on a trip up to North Dakota on a kind of firemen's trip to see archeological sites. It was only much later that I realized that Carlyle and George had shared Moss's and my food expenses on the trip, because neither Moss nor I had any money between us. Stopping in Pierre, South Dakota, outside the capitol building, a suited gentleman observed Carlyle locking the door on his car. He passed by and remarked in a kind of hurt voice, "We don't have to lock car doors in this town." We slept out in the open on camp cots. There was never a fear of molestation. We ate in "cafes," not restaurants. I learned that there was a rule of thumb in leaving a tip. If the table was covered with real cloth and not oil cloth, it deserved a higher tip. An advertisement for distinguishing "quality beef" has carried over in my memory. Quality beef had to be "marbleized," or contain veins of fat, in order to be succulent. It did taste good.

No one has come forward to ask me about the contents of my field notes and observations since I had made them, making me wonder if my data had ever been used. I have always suspected that much of the WPA excavated material was boxed up and stored in some museum in the wistful and hopeful expectation that the excavators or principal investigators would eventually write the data up. There are bulging storehouses full of artifacts still undescribed from the WPA excavations of mounds and other Indian sites excavated across the country.

Eleven years later I returned to the Plains, working for the River Basin Survey. My introduction to the River Basin Surveys headquarters in Lincoln, Nebraska, was a kind of a shock after experiencing the officialdom of the Smithsonian Institution in Washington. The main office occupied what must have been a large store front. There were ranges of desks and tables on the open floor, several of which were occupied by archeologists, writing up their project reports. There was a clatter of typewriters, people were walking around holding sheets of paper, and there was a general low hubbub of conversation. I had the impression that it looked like a newspaper office. I was the newcomer to the group, and while the names of the staff were familiar to me from articles they had written, papers they had given, or from other associations, I felt like a stranger.

I was not in the Lincoln office of the River Basin Surveys long enough to know all of the archeologists. I never attended any staff meetings nor, as I remember, were there any meetings of any kind, including planned lectures or talks. My impression was that people seemed to mind their own business, busily writing up reports or papers connected with their special projects. At lunch time the archeologists scattered. There was no special eating place or round table for the archeologists. Individuality seemed to be the thing. On reflection this would have been the natural outcome of professional archeologists who had come together from different universities around the country, trained by different professors with different field interests, all united by their current interest in Plains archeology, a chance to do archeology, to build a career in archeology, as well as to earn some money at the same time. I am sure that none of the archeologists wanted to make a career out of River Basin Surveys archeology. I had the impression that it was a fill-in job, for most were still young enough to look forward to future employment elsewhere. Indeed, the archeologists whom I know who were active in River Basin Surveys did go on to leadership positions elsewhere in museums and universities.

Between the last week in July and the beginning of October 1952, J. Mett Shippee and I made field reconnaissances of five river basins

in north and northeast central Kansas. These were chronologically the Kirwin, Tuttle Creek, Glen Elder, Webster, and Wilson reservoirs. Mett was a most hard working assistant. From the moment the car door was open at a site, he was off scanning the furrows in the fields and the river banks. About the only thing I recall well of the survey was seeing the Waconda Spring, the "Great Spirit Spring" on the Glen Elder Reservoir. We found a lot of animosity at the Tuttle Creek dam site, where the local people called the project "dam foolishness," painted in yellow on a big rented billboard. Historic places at the latter reservoir site were to be flooded, such as the Oregon Trail crossings of the Big Blue and the Black Vermillion rivers.

To cover five reservoir areas for a preliminary archeological assessment in the space of about 9½ weeks was something of a questionable challenge. We went into the areas equipped with literary source material such as was available in print. Then again, we practiced the old recommended adage, knock on every door. However, in most areas there were no doors to knock on, or if there were any, their owners had already left. We were obliged to be satisfied with asking residents within the vicinity of the projected reservoirs for information about where locally known archeological sites were and who had made artifact collections in the area. Mett, who came from Missouri, was able to elicit information better than I, since he was readily recognized as a fellow who understood plainsmen and knew the nature of the country, the people, and their ways. As a Long Islander, I knew about crabbing, oystering, and clamming, which were not in the vocabulary of the ordinary Kansan.

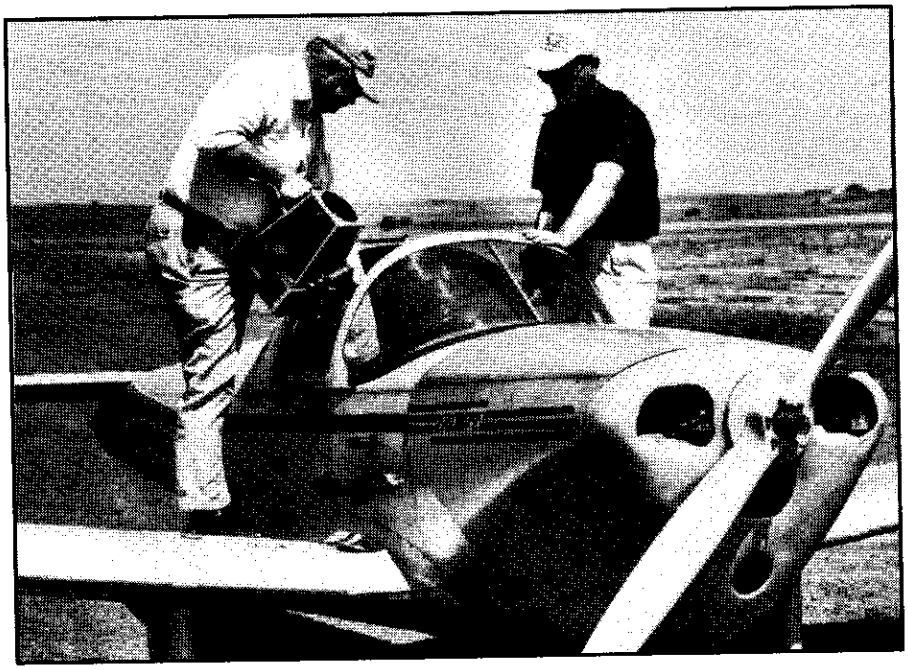
Frank H. H. Roberts, Jr., the director of the River Basin Surveys in Washington, D.C., had asked me about the possibility of making an aerial survey of the archeological sites being excavated under the River Basins program in the Missouri Basin. He knew of my interest in aerial photography. I packed my suitcases in my Ercoupe, a two-seater, low-wing monoplane, and set off flying into the setting sun. It was a kind of an archeological barnstorming trip. All of my field notebooks and the black and white photographs I took, plus my reports, were turned over to the files of the River Basin Surveys.

I met Nathaniel Dewell in Lincoln, Nebraska, where I left Mett Shippee. Nathaniel was a photographer, who owned a large military aerial camera. He was familiar with aerial photography, although taking pictures from my type of aircraft was a new introduction to him. With his camera and ample figure, he just about filled the cockpit.

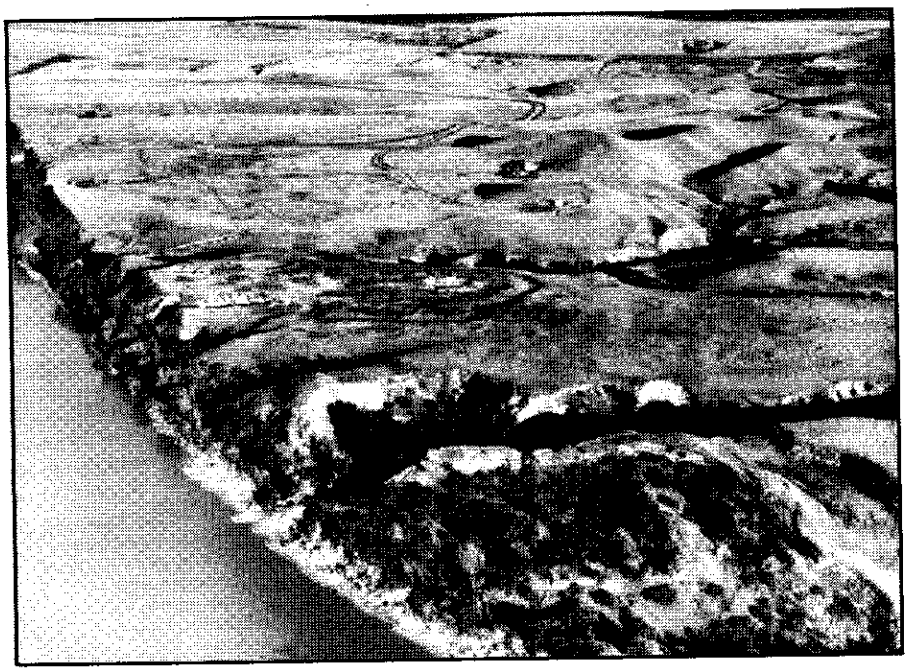
The excavated sites were very easy to pick out from the air on the approach. The hard pan soil, cleared of the darker overburden, under some conditions actually reflected the sun's light into our eyes. Seen from a distance, even miles away from the air, these mirrors gleamed like beacons. Usually we tried to time our photography for late afternoon so that we did not get any reflections back at us and had some shadow relief on the surface features. I first made a pass around the site to assess the condition of the site, the lighting, and the best views. For taking oblique photographs, I put the aircraft into a left angled forward side slip glide with reduced power, giving Nat an unobstructed shot, clear of the propeller and wing. For vertical shots we had to use a different tactic. On the approach to the archeological site, I had Nat aim his camera off the right wing tip and shoot on my command of "ready." I had to put the aircraft into a tight powered right turn, dipping my right wing straight down. I think that Nat was too busy taking pictures to be scared on this maneuver, which was done, as I recall, a few hundred feet over the ground. I do not know if he committed to paper any of his experiences on the flights we took.

In quick succession, we took aerial views of the Buffalo Pasture site and the Talking Crow Village site in South Dakota, the Medicine Creek site in Nebraska, the Night Walker Butte site, Fort Berthold, and Like a Fishhook Village site in North Dakota. We flew on up to Montana, where we took views of a "wagon wheel" site and other reservoir areas, and then on to Wyoming. One of the memorable side trips was to see the Devil's Tower, which was a magnificent natural feature.

Two incidents among the several experienced on this trip stand out for me. One was our flight to the Medicine Creek site in eastern Nebraska. On one of our passes, I

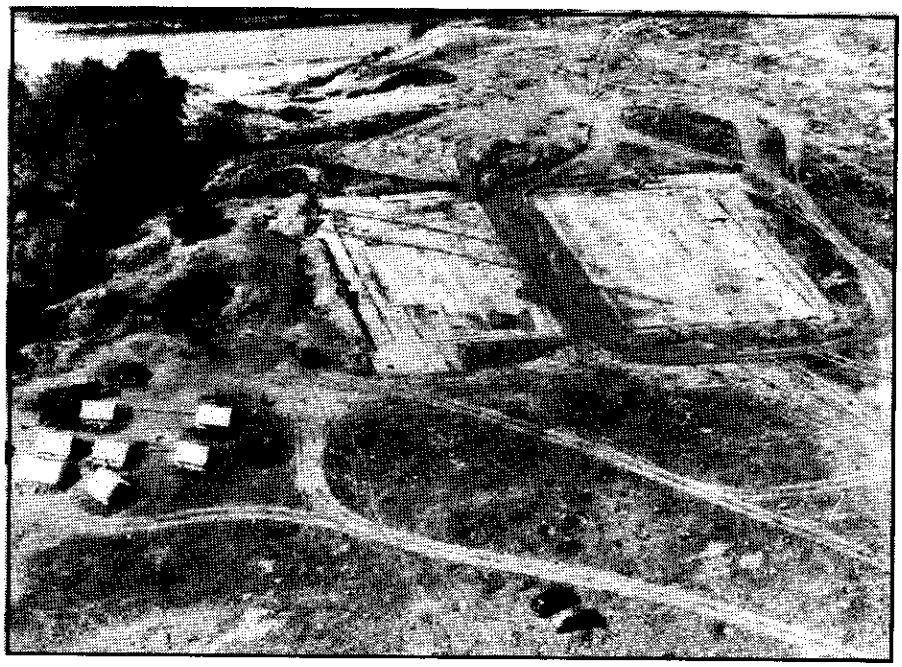


Nathaniel Dewell and Ralph Solecki getting ready for an aerial photography mission, 1952. The camera is a Folmer Graphic Aero Camera K-10, using 5 x 7 roll film. Smithsonian Institution photograph.



Buffalo Pasture earthlodge site near Pierre, South Dakota, 1952. The earth dam across the Missouri River is in the upper part of the photograph. Smithsonian Institution photograph.

Night Walker's Butte site, Garrison Reservoir, North Dakota, 1952. Smithsonian Institution photograph.



Fort Berthold excavation on the Missouri River, Garrison Reservoir, North Dakota, 1952. Smithsonian Institution photograph.

decided to get a different view of the site. I flew down into the gorge below the level of the plateau. There, ranged on the bluff's edge, was Frank Roberts with a number of accompanying archeologists, who were making an official inspection of the site. To this day I do not know if the site visitors knew whose plane they were looking at.

The other incident has some side humor. Our means of communication with the archeologists on the ground on our initial visit was to write out information on halves of letter size paper sheets, suggesting we meet at the local town airport for a consultation. Flying over the site, I had Nat hold the 10 or so paper slips in his right hand over his head out over the canopy. Then I would put the plane in a low power dive toward the site and pull up under full power. At the moment of the pull out, I told Nat to release the notes. The prop wash would direct the paper straight down almost into the hands of the archeologists below. At the Buffalo Pasture site, we waited for a hand wave of acknowledgment, but none seemed to be immediately forthcoming. Circling around, we could see some sudden activity around one of the tents. A couple of people came out, arms loaded with several rolls of white paper, which turned out to be toilet tissue. They ran out to a clearing and began to stake the tissue out on the ground, making letters about four feet tall. Meanwhile we kept circling around. Finally, the message printed in toilet paper read, "Paul is in Pierre." Paul Cooper was the director of the excavation project.

The Buffalo Pasture site sticks in my memory for another reason. On approaching the site, which lay on the right bank of the Missouri, we were flying down river, toward the big Oahe Dam near Pierre. There was a strong headwind from the south, and I could see dust flying over the dam toward us. Flying over the river center, preparatory to making my right turn toward the site at about 800 feet, I noticed that at full power and level attitude, the altimeter kept unwinding strangely. This gave me a bad shock. Then I realized that there was a big downdraft over the dam, which threatened to pull us down into the river. I made a quick 180 degree turn and got us out of the situation. Thereafter I made my approaches to the site clear of the river and the dam wind flow.

Our flights over the sites were usually of short duration, but the distances between sites made for a couple hours of tedium in the warm cockpit, flying by visual flight rules. At each site where we stopped, we generally stayed overnight and supped with the excavation crew. At one of the sites, I heard grumbling from the students on the dig. They were bitterly complaining that the food money for the entertainment and hosting of visiting archeologists was a drain on their finances. They did their own cooking and shared in the purchase of the food supplies for their group. It made me realize that we should have brought some presents for their larder. However, with Nat's camera and supplies and what little baggage we had, we were up to our weight limit.

According to my flight log, I had flown about 100 hours on the project. For me it was combining flying, very interesting flying, and archeology. The River Basin Surveys used a number of our site views in illustrations of papers and articles.

I was impressed by one thing that the views revealed about techniques of site excavation. In pre-World War II excavations, even when plenty of WPA manpower was available, the archeologists generally excavated only the most visible and prominent features, such as the earthlodge sites. When participating in these excavations during the summers of 1939-1941, I had often wondered what lay among the earthlodge sites and what we were missing. There should have been post molds for drying racks and perhaps some storage pits; surely not all storage pits were dug within the earthlodge sites. Possibly burials were present also. This question was not often explored on the field expeditions I had been on. The selective excavations of pre-World War II appeared to me to be interested mainly in the exposure of the earthlodge sites with their included storage pits and the prominently situated hilltops, which held the burials.

On our flights I noted that a number of sites were being excavated in the "old fashioned way,"

but there were others that were exposed broadcast. This came about with the introduction of earthmoving machinery, such as the road scraper, which could slice away inches at a time with wonderful control. I do not know what the weight of the equipment did to sites; certainly there must have been some soil compaction. However, equipment with big rubber tires could have ameliorated the chances of much damage to subterranean features, such as storage pits, etc. The machine-cleaned sites were seen from the air as big rectangles of exposed soil, dotted with features, such as the post molds and occasional storage pits. The earthlodges, so far as I could determine, were not touched with earthmoving machinery. They were excavated by hand, the old way with the hand shovel.

There are many contrasts to be noted between the archeology in the Plains as I knew it between the pre-World War II days and the post-World War II experiences. For one, the WPA-driven archeological excavations of sites in both lowland and highland areas differed from the lowland and Missouri River bottom archeology of the Bureau of Reclamation, U.S. Department of the Interior, and the U.S. Army Corps of Engineers, which sparked the River Basin Surveys after the war. In the latter period, in contrast to the former WPA period, there was a sense of urgency to keep ahead of the dam and reservoir constructions. Indeed, a number of sites had to be excavated with the water lapping at the edges. Another distinction between the two periods is that more archeologists were trained under the River Basins program and the amount of archeological information was exponential in quantity. One could see that, under the WPA aegis, the archeologists rubbed shoulders with the unemployed every day and reached an understanding of their complaints and problems and the shortcomings of America. In the River Basin Surveys period, contact with the local people was not so close as it was during the WPA days. Indeed, the River Basin Surveys archeologists, tainted by their connections with the reservoir engineers, had a rather strained and cool relationship with the local farmers and residents who were directly and adversely affected. In a sense the one was geared toward archeology as an offshoot of the depression era, while the archeology of the other could be characterized as purely a salvage measure.

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ADDITIONAL NOTES ON LOREN EISELEY'S YEARS AT THE UNIVERSITY OF KANSAS

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Additional information on the career of Loren C. Eiseley, the first professional anthropologist at the University of Kansas between the years 1937 and 1944, is presented. Gleaned from the correspondence between Eiseley and Waldo R. Wedel in the Waldo R. Wedel Collection, Smithsonian Institution, the letters reveal details of archeological efforts at the Spring Creek site, a previously unreported dig in Doniphan County, as well as discussions on securing Works Projects Administration funds for archeological field work. The letters also further document Eiseley's ambitious plans to bring physical anthropology into the university's curriculum.

In 1937 University of Kansas Department of Sociology chairman, Carroll D. Clark, succeeded in winning acceptance from the university's administration for the hiring of an anthropologist, namely Loren C. Eiseley, a recent graduate from the University of Pennsylvania. Critical to Eiseley's hiring were the positive recommendations of Frank Speck of the University of Pennsylvania, William Duncan Strong, an anthropologist formerly posted at the University of Nebraska and then at Columbia University, and Waldo R. Wedel of the Smithsonian Institution (Hawley 1992a). Over his seven years at Kansas, Eiseley frequently corresponded with Wedel, seeking information, advice, or using him for a sounding board for ideas. These letters, along with copies of Wedel's replies, are stored with Dr. Wedel's papers in Box 86 of the Waldo R. Wedel Collection, Anthropology Archives, Smithsonian Institution National Museum of Natural History. While incomplete, its 19 pages add to our knowledge of Eiseley's activities at Kansas. There is additional information on his work on the Archaic component of the Spring Creek site, the excavation of a mound in northeast Kansas, his decision to solicit Works Projects Administration (WPA) funds, and his dream of not only adding physical anthropology to the curriculum, but of making Kansas a major research institution for physical anthropology.

A deep site

From the outset, Wedel encouraged the newest anthropologist in the Central Plains to commence field work. Indeed, before Eiseley even moved to Lawrence, Wedel had invited him to participate in his 1937 field campaign, the work to be carried out in sites near Kansas City and in Doniphan and Riley counties in Kansas (Figure 1). The intent of this invitation was clear: to familiarize Eiseley with the area in easy reach of Lawrence and the constantly multiplying archeological problems of the Central Plains (W. R. Wedel to L. C. Eiseley, letter, 12 May 1937). Plains archeology had not, after all, been quiescent in the years Eiseley was at Pennsylvania. Eiseley, in fact, did work with Wedel for part of that field season, and at that time he struck up a lifelong friendship with J. Mett and Margaret Shippee (see Adair 1992 and Wagner et al. 1992). However, it was not until 1940 that he pursued further the research potential of the area.

Eiseley had not been at Kansas long before he was led to the Spring Creek site near Smith Center. On weekends during the winter of 1937 and into 1938, Eiseley conducted investigations, amounting in today's parlance to testing. To assist in determining the age of the site, which he initially hoped might be Folsom, he called in

Figure 1. Waldo R. Wedel's crew in Doniphan County, Kansas, 1937. From right to left: Loren C. Eiseley, Margaret Shippee, Richard Slattery, and Hugh Stabler. Photo courtesy of Joan Shippee Wagner, Kansas City, Missouri.

geologist, H. T. U. Smith (Hawley 1992a). The correspondence with Wedel adds a few additional details to the story. Writing in early 1938, Eiseley remarked to Wedel that he was working at "a deep site somewhat suggestive of Sterns Creek [a deeply buried Woodland-age site in southeast Nebraska] . . . . It seems lacking in pottery . . ." (L. C. Eiseley to W. R. Wedel, letter, 30 January 1938). Although he expressed doubts that much of the site's deposits had escaped the ravages of erosion, he managed to find a projectile point, as well as other artifacts and bison bone. Unmentioned in his published report (Eiseley 1939) but not unnoticed was a shallowly buried component on the east side of the valley that he attributed to the newly designated Upper Republican culture.

Wedel responded with interest. "Your mention of buried sites in Smith County intrigues me immensely but I am puzzled by the apparent absence of pottery. Unless the stuff turns out to be pre-ceramic, it would fit into the picture much better if you found Woodland or Sterns Creek pottery--or even Hopewellian . . . . New pre-ceramic horizons would be interesting too . . ." (W. R. Wedel to L. C. Eiseley, letter, 14 February 1938). Pre-ceramic sites, now termed Archaic, were few and far between and hence not well understood at all. This is clearly reflected by Wedel's (1938:129) comments in a contemporary article:

> That a very ancient hunting culture may have existed is hinted at by the occasional discovery of projectile points reminiscent of the so-called Folsom type . . . . These, however, preceded the introduction of maize cultivation by many hundreds or even thousands of years. What events were taking place in the Great Plains during this long interval?

Following visits to the site with Smith, whom Eiseley called "a most excellent fieldman," he was confident that the site was, indeed, "some pre-ceramic horizon post-dating Folsom" (L. C. Eiseley to W. R. Wedel, letter, 8 May 1938; Eiseley 1939). Eiseley's assessment of the site ran somewhat counter to the then current anthropological dogma of the uninhabitability of the Great Plains prior to the Native American acquisition of the horse (see Wedel 1982).

A radiocarbon age of 2940 ± 70 B.P. (Tx-8146; wood charcoal; $\delta^{13}C$ = -26.0‰) has recently been obtained from wood charcoal from the lower component of the Spring Creek site. The date places the site in the Late Archaic and confirms that it was, indeed, the first such investigated in Kansas. Smith's (1938; Eiseley 1939) suggestion that the site may be as old as 5,000 years was based on his reading of geomorphic changes in the stream valley, changes that still could not be adequately judged in terms of the amount of time necessary for them to occur. Without radiometric means and cultural deposits of known age, Smith and Eiseley could do little more than guess. Of interest, Eiseley supplied Wedel with details of the point not included in the published reports (e.g., Smith 1938; Eiseley 1939). According to Eiseley, the point had a length of 1 3/8 inches (4.5 cm) and was generally unlike Upper Republican projectile points (L. C. Eiseley to W. R. Wedel, letter, 8 May 1938). A tracing of the point also was included in the letter (Figure 2). In its configuration and size the point compares well with points from Level II at Signal Butte (Strong 1935:232-233, Plate 24), as well as other Archaic sites subsequently excavated. Eiseley promised a full report but none materialized, apparently swept aside in a falling out with Smith (Hawley 1992a:12). A full report on the site would have been a path-breaking document.

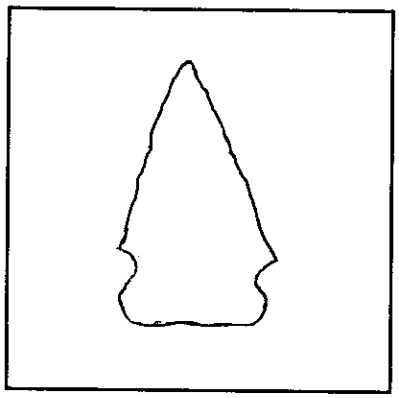

Figure 2. Eiseley's tracing of point from Spring Creek site.

A beginning no matter how small . . .

To cover Eiseley's field expenses for the work at Spring Creek, Clark was able to secure $100 from the administration, but the problem of funding, or rather the lack thereof, is a recurrent theme in Eiseley's years in Kansas (Hawley 1992a). Early in 1938 Wedel raised the issue of applying for WPA monies, stating that "[a] beginning no matter how small would be all to the good" (W. R. Wedel to L. C. Eiseley, letter, 14 February 1938). Investigation of one site, possibly Spring Creek, would be a start and, once begun, precedent would then be an additional advantage in Eiseley's favor. But Eiseley instead chose

> [a]fter considering field problems . . . not to attempt to secure WPA funds this year [1938] . . . . The Department has requested me to offer three new advanced courses in Anthropology . . . *besides* the work that I am now carrying. This puts . . . extreme pressure on me to compile additional class notes . . . . I am particularly anxious to elevate the scholarly quality of the anthropology being offered at Kansas because rumors have reached me . . . that our friend [Earl H. Bell] at Nebraska is considered weak in this regard . . . I do not wish the subject . . . to lose status . . . by neglect . . . at this stage [emphasis in original] (L. C. Eiseley to W. R. Wedel, letter, 8 May 1938).

The following year Eiseley did decide to petition for WPA funds, this following a Christmas break visit with Wedel at the Smithsonian. Clark was an instant ally of the project and, despite "considerable inertia to overcome . . . on the part of the University

Administration which . . . seems to look askance at any project which would make use of WPA funds" (L. C. Eiseley to W. R. Wedel, letter, 30 December 1939), he and Eiseley set to work at once drumming up support (Eiseley and Clark 1940). At Eiseley's suggestion Wedel and Strong submitted letters offering compelling testimony on the value of securing WPA funds and implementing scientific archeological research on a hitherto unknown scale at the University of Kansas (see Hawley 1992a:14-15). As an aside, it perhaps merits pointing out that Wedel, besides being a major factor in getting Kansas to hire Eiseley, also spurred Eiseley and the University of Kansas to attempt archeological fieldwork. By such behind-the-scenes encouragement, Wedel displayed his hand as a *gray eminence* in Plains archeology.

Inroads were made in swaying a recalcitrant administration, but only another $100 was to be available for archeological research in fiscal 1940-1941 (Hawley 1992a:13-14). Eiseley was soon off to Columbia University and the American Museum of Natural History, but before leaving he did make use of the awarded money. Eiseley noted in a May 16, 1940, letter that he had "occasion to excavate the second stone grave near Highland, Kansas, which Nebraska left untouched at the time they excavated there this [previous] fall." The mounds were actually nearer to Iowa Point. The first grave, dug by Stanley Bartos (reported in Wedel 1943:169), yielded little and "[t]he second one proved as barren of artifacts as the first, and the skeletal material had disintegrated beyond recovery." Noting that "[t]he grave presented a few slight variations in structure from the other," he readily offered his data to Wedel. Mention of Eiseley's excavation is not made in Wedel's report, so it is unclear if Eiseley transmitted the particulars to him. Cooperation and the concomitant exchange of information as a rule was close in that era, not only between Eiseley and Wedel but among others as well. One exception seems to have been among Earl H. Bell at Nebraska and some of his contemporaries, Eiseley especially. Bell took the credit for Eiseley's hire by Kansas, which Eiseley knew was blatantly untrue. At one point, he commented to Wedel that as "there are to be changes at Nebraska, I foresee the possibility of more extended co-operation with the Anthro. Department there" (Eiseley to Wedel, November 19, 1939).

To contribute something new...

Eiseley departed Kansas for New York in the early summer of 1940 for post-doctoral study at Columbia and the American Museum of Natural History (Hawley 1992a: 16-17). He had applied for and been awarded a Social Science Research Grant and intended to use the $2,700 award for an intensive course of study in physical anthropology. Such study was a necessary prelude to the hoped for realization of an ambitious project, which Eiseley told Wedel was "very close to my heart" (L. C. Eiseley to W. R. Wedel, letter, 19 November 1939).

> There is a very strong Department of Anatomy at Kansas, and several queries have been addressed as to whether I could offer a course in Physical Anthropology. The Museum [of Natural History] is slowly being renovated and . . . my relations with the paleontologists who control it [H.H. Lane and Claude Hibbard, in particular], are very amicable. It is quite likely . . . I may be given a room for a laboratory there [and probably access to the skeletal material stored there]. It has become evident to me in examining various collections throughout this area [in particular, probably, the ossuary at Salina; the Highland dig in a mound site may have had as a secondary motive the securing of skeletal specimens] that Physical Anthropology is of growing importance in . . . our search for early man in the Plains [and] in our attempt to study the physical types associated with the later intermediate cultures . . . .
>
> Perhaps I should make it clear that in contemplating the development of Physical Anthropology here at Kansas, I am doing so with the feeling that it could serve all of our purposes in this area. So far as I am aware, there is no one between Chicago and the University

of California, who is actively engaged in this subject. It seems to me that Physical Anthropology might be a way in which Kansas could contribute something to our efforts in the Middle West--something that would be distinct from what is carried on at Nebraska whose extensive field operations in archeology and paleontology we cannot, apparently, hope to equal for a long time.

It is not my intention to abandon archeology .... I do think, however, that there exists here, an opportunity for Kansas to contribute something, and to build up a nearby source of information upon this subject .... Remember, also, that with the presence of Haskell [Institute, now Haskell Indian Nations University] on the edge of town we have a laboratory of living Indian types which could be used for comparative purposes --something which is present at no other university on the Plains .... It is my opinion, also, that the introduction of a new element such as this, in which Kansas would have a chance for distinctive activity (specialization, so to speak), would greatly stimulate ... interest of the Administration ... (L. C. Eiseley to W. R. Wedel, letter, 19 November 1939).

Eiseley already had gained support from Frank Speck and A. Irving Hallowell, also at Pennsylvania, and hoped to enlist the support of Wedel and Strong. Even before he decided to seek WPA funds for archeology, he had applied for the Social Science Research Council grant with some assurances from the Council chairman that physical anthropological research could be encompassed within the realm of social science. Unfortunately, there is a gap in the correspondence, and Wedel's opinion of the plan is not known.

Evil times

Eiseley returned from his year of study in the east to teach during the fall semester of 1941. In December the Japanese attack on Pearl Harbor and the entry of America into the war, signaled the end of business as usual. Eiseley continued to teach in anthropology but spent much of his time in the Anatomy Department as part of the war effort. In 1944 he did take the opportunity to analyze a skull from the R. S. Dinsmore collection in Dyche Hall. The skull, unusual for its pathological elongation or scaphocephaly, had been dug from a mound near Troy, Kansas, not far from the area where Eiseley excavated a mound in 1940. The resulting paper, co-authored with C. Willet Asling and published in the *Transactions of the Kansas Academy of Science* in 1944, was the first paper published on the analysis of human skeletal remains in Kansas since Ales Hrdlicka's (1903) critique of the so-called "Lansing Man" remains. Eiseley (1943a, 1943b) wrote two other papers on physical anthropological topics in the early war years. In part these may have been an effort to keep interest in the subject alive at Kansas during the war and to keep himself involved in the discipline as well. These papers, along with articles in *Scientific American* and other journals penned in those years, did not involve fieldwork, which was a virtual impossibility during the war.

Not all was well at Kansas, however. In August Eiseley wrote to Wedel to tell him that he had resigned. "In a way I am sorry to leave K.U. but the place has fallen on evil times. There is a poverty complex in the school and what I regard as a poor administration ..." (L. C. Eiseley to W. R. Wedel, letter, 26 August 1944). Although Kansas had been, as Wedel pointed out by way of encouragement in 1937, "a wise choice ... so far as archeological prospects and the possibility of making a name for yourself ... are concerned" (W. R. Wedel to L. C. Eiseley, letter, 12 May 1937), Eiseley's successes were limited. He dreamed large but in the end found that "to remain would be simply to bury oneself to no purpose" (L. C. Eiseley to W. R. Wedel, letter, 26 August 1944). Ironically, his contributions to archeology and physical anthropology while at Kansas, small though they might have been, were largely forgotten. In part his own lack of initiative worked against him. He was too long in coming around to trying to obtain WPA funding, for instance. Full reports

on the sites he had investigated certainly would have helped. To his credit, though, he was responsible for stimulating enough interest in anthropology and archeology for a replacement to be hired following the war (Hawley 1992b:23).

Acknowledgments. Grateful acknowledgment is given to the Smithsonian Institution, National Museum of Natural History, Anthropology Archives for assistance in locating and copying the documents that provided the basis for this paper. I also want to thank my wife Amy for her help while at the Archives and to Von and Connie Hawley for room and board during our visit in the Washington, D.C., area. Fred Scott offered helpful comments on an earlier draft.

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FROM SOUTHEASTERN KANSAS TO NORTHWESTERN MISSOURI: RECENT ARCHEOLOGICAL INVESTIGATIONS BY THE SAINT JOSEPH MUSEUM

Jim D. Feagins
Saint Joseph Museum

The Kansas Anthropologist 15(2), 1994, pp. 23-30

This paper is an effort to summarize part of the more recent archeological research conducted by the Saint Joseph Museum in the eastern Central Plains along the Kansas-Missouri border. Data and interpretations from five projects concern various cultural resources, including Euroamerican farmsteads, a fur trading post, a protohistoric Oneota (Kansa) village, a prehistoric rock- and earth-filled mound, and a number of Woodland and Late Archaic habitation sites.

Among the archeological projects undertaken by the Saint Joseph Museum during the past year, only five will be summarized herein (Figure 1). As this is being written, three of the projects have been completed, and two are in various stages of field work or analysis and writing. The following projects are described: 1) survey and testing of the proposed Woods wetland area along Limestone Creek in Bourbon County, Kansas, 2) survey of a proposed reservoir and water line project also in Bourbon County, 3) excavation of the Robidoux fur trading post in St. Joseph, Missouri, 4) survey and testing the Slough site (14JO402-A) in Johnson County, Kansas, and 5) cultural resource assessment of part of the King Hill (Oneota) site in St. Joseph.

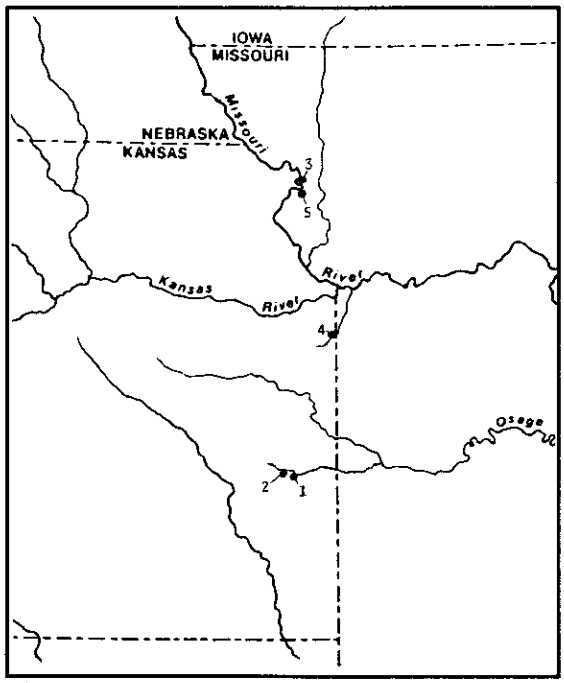

Figure 1. Locations of selected archeological research projects recently conducted by the Saint Joseph Museum. Sites are identified by number in introductory paragraph.

WOODS WETLAND SURVEY AND TESTING

The Woods wetland project provided for the construction of two dikes in meander scar areas on the floodplain of Limestone Creek in northern Bourbon County, Kansas (Feagins 1993b). Limestone Creek is a tributary of the Little Osage River. The archeological research was conducted by the museum under contract with the Flint Hills National Wildlife Refuge through their private lands program. Jim Feagins was the principal investigator. Four previously reported sites--14BO432, 14BO1462, 14BO1475, and 14BO2466--were found to be in the project area. They had been reported years ago, resulting from the Little Osage River Valley Archaeological Survey (LORVAS) project. (The ongoing LORVAS project is also conducted by Jim Feagins.) The museum and LORVAS collections were analyzed, and site 14BO2466 was tested.

Sites 14BO1462 and 14BO2466 are Middle Ceramic in age and contain cordmarked, grog-

tempered pottery, as well as various lithic tools and animal bones. A Late Archaic site, 14BO1475, contained manos of sandstone and quartzite, chert cores, flakes, bifacial knives, choppers, scrapers, and dartpoints. This small campsite occupied the side of an old meander scar. The largest of the four sites is 14BO432. While a Late Archaic component is present on the site, the largest area contains a Woodland period occupation. Among the artifacts recovered from this site are cores, flakes, end scrapers, bifaces, a drill, a groundstone celt, a grinding slab, many expanding-stemmed dartpoints, and a few Middle Ceramic arrowpoints. Over 98 percent of the pottery sherds are tempered with grog (previously fired particles of clay or crushed sherds). Most of the sherds are plain; only 5.5 percent are cordmarked. The site may have been used periodically until approximately A.D. 1100. However, the major occupation of the site was earlier, during Early Ceramic times.

BOURBON CO. WATER DISTRICT SURVEY

In the winter of 1993-1994, the museum conducted an archeological survey of proposed reservoir, treatment plant, and water tower locations, and 16.5 miles (including an alternate corridor) of water line right-of-way (Feagins 1994a). This survey was in Bourbon County, Kansas, northwest of Fort Scott. The Bourbon County Rural Water District No. 4 project is funded by a grant from Housing and Urban Development's (HUD) Small Cities Community Development Block Grant (CDBG) Program.

Twelve sites were within or near the proposed construction areas. Eight of these sites--14BO439, 14BO469, 14BO477, 14BO1414, 14BO1416, 14BO1417, 14BO1419, and 14BO1490--had been previously reported during the LORVAS investigations in this area. The Saint Joseph Museum's survey located four additional sites--14BO3452, 14BO3453, 14BO3454, and 14BO3455. The last site recorded by the museum is one of only two mound sites reported in the Little Osage River drainage in Kansas. (There are over 360 sites recorded by the LORVAS investigations in this river valley.) From the two surveys collections were available for study from 10 of the 12 sites investigated for the water district. No collections were obtained from a historic farmstead or the small rock- and earth-filled mound.

The 12 sites range from Middle Archaic campsites to Euroamerican farmsteads. With over 5,000 artifacts from these sites, Late Archaic and Woodland components are most commonly represented in the museum and LORVAS collections. One of the sites, 14BO439, contains a Cuesta phase component along with other Woodland occupations and a historic component. General cultural affiliation was determined for 83 percent of the sites investigated during this water district project.

The origins for the cherts found on these sites were chiefly the Ozarks and local regalithic sources. However, some cherts were derived from the Flint Hills and more rarely from the Winterset formation nearer Kansas City. This is generally true for the Archaic and Woodland sites in the Little Osage River drainage in Kansas. However, on some of the Late Ceramic period sites in the valley, there is a pronounced increase in the cherts from the Flint Hills.

ROBIDOUX FUR TRADING POST

Mike Fisher (Archaeological Research Associate) is directing the museum's second season of excavation at the Robidoux fur trading post, 23BN62. This excavation resulted from the 1989 detective work by two other staff members, Marilyn Taylor (Curator of Ethnology) and Jackie Lewin (then Curator of History). Their historic record analysis correctly located the now deeply buried site from among several suggested locations (Lewin and Taylor 1989).

Joseph Robidoux, fur trader and founder of St. Joseph, Missouri, established a trading post in the Missouri River valley below the Blacksnake Hills in 1827. This trading post eventually consisted of three structures. The site is presently deeply buried under fill below a highway overpass a few blocks from downtown St. Joseph. In 1859-1860 a meat packing house was built on the site. The trading post buildings were included within the packing plant structure. A newspaper account stated, and archeological evidence confirmed, that all of this structure,

including the trading post portion, did not burn in the fire of 1899 (Fisher 1994). On or before 1911 the John S. Brittian Dry Goods Co. had constructed a large warehouse on the site. This structure also burned. Over the years cultural and natural deposits accumulated on the site, protecting the early structures from later I-229 overpass construction activities.

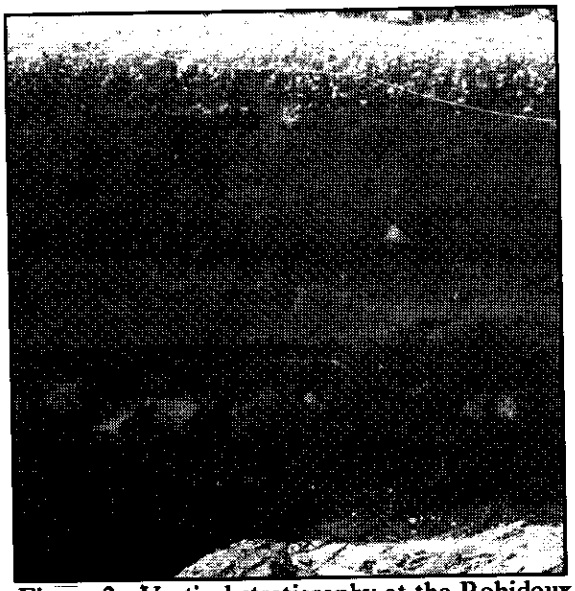

Figure 2. Vertical stratigraphy at the Robidoux fur trading post, 23BN62.

The site is stratified, with the remains of the dry goods warehouse and meat packing house present in the lower levels of a portion of the site (Figure 2) (Fisher, personal communication 1994). It is fortunate that this is the area where part of the fur trading post could have been incorporated into the original packing plant structure. Among the most notable of the many artifacts recovered so far are two lead seals used in the fur trade. Since 1993 was the sesquicentennial of the founding of St. Joseph, the first field season was a most opportune time to begin excavation of this site so important to the fur trade and ultimate creation of the city.

TESTING THE SLOUGH SITE, 14JO402

Plains Woodland and Late Archaic components and a late Paleoindian projectile point were recovered from Area A at the Slough site, 14JO402 (Feagins 1994d). This Overland Park, Kansas, site is located in Johnson County's Blue River valley. The Slough site was surveyed and Area A was tested by the Saint Joseph Museum under the principal direction of Jim Feagins. This research was partly funded by the city, supplemented with the volunteer efforts of many individuals, both professional and avocational. No federal or state funds were available for the street relocation project, and the city of Overland Park was not required to support any archeological research.

This multicomponent prehistoric site occupies three areas along an old Blue River meander scar. Surface collections were studied from each area, but only the subsurface in Area A was sampled since this is the only part of the site that would be disturbed by the city's construction project.

The Plains Woodland component is found in the upper 40 cm below ground surface. This component occupied almost all of the A soil horizon, of which approximately half was Ap (plowzone) soil. Post dating the time of Christ, this component contained corner-notched projectile points, ovate chert bifaces (Figure 3), cordmarked and grit-tempered pottery sherds, and chert debitage of various types. Also found were small pieces of charcoal, red and yellow ocher, sandstone, and limestone. Clearly, the Plains Woodland people at the site were using dartpoints to hunt animals, stone knives to butcher game, pottery for cooking and storing various types of food, and their knowledge of stone manufacturing techniques to produce tools.

A late Archaic occupation, during the second millennium before Christ, is located at a depth of 45-51 cm below the ground surface in the thin BA and upper part of the Btl soil horizons. Cultural material at this level was not nearly as abundant as in the upper component. At this Late Archaic level chert flakes, a bladelet, heat-altered sandstone, small pieces of fired animal bone, and large pieces of scattered charcoal were recovered. One large charcoal sample supplied a radioactive carbon date (Beta-65188) of 3,510 $\pm$ 80 years B.P. Dr. Mary Adair, archeologist with research experience in paleoethnobotany at the University of Kansas, examined a flotation sample from this level. She identified charred goosefoot (*Chenopodium* sp.)

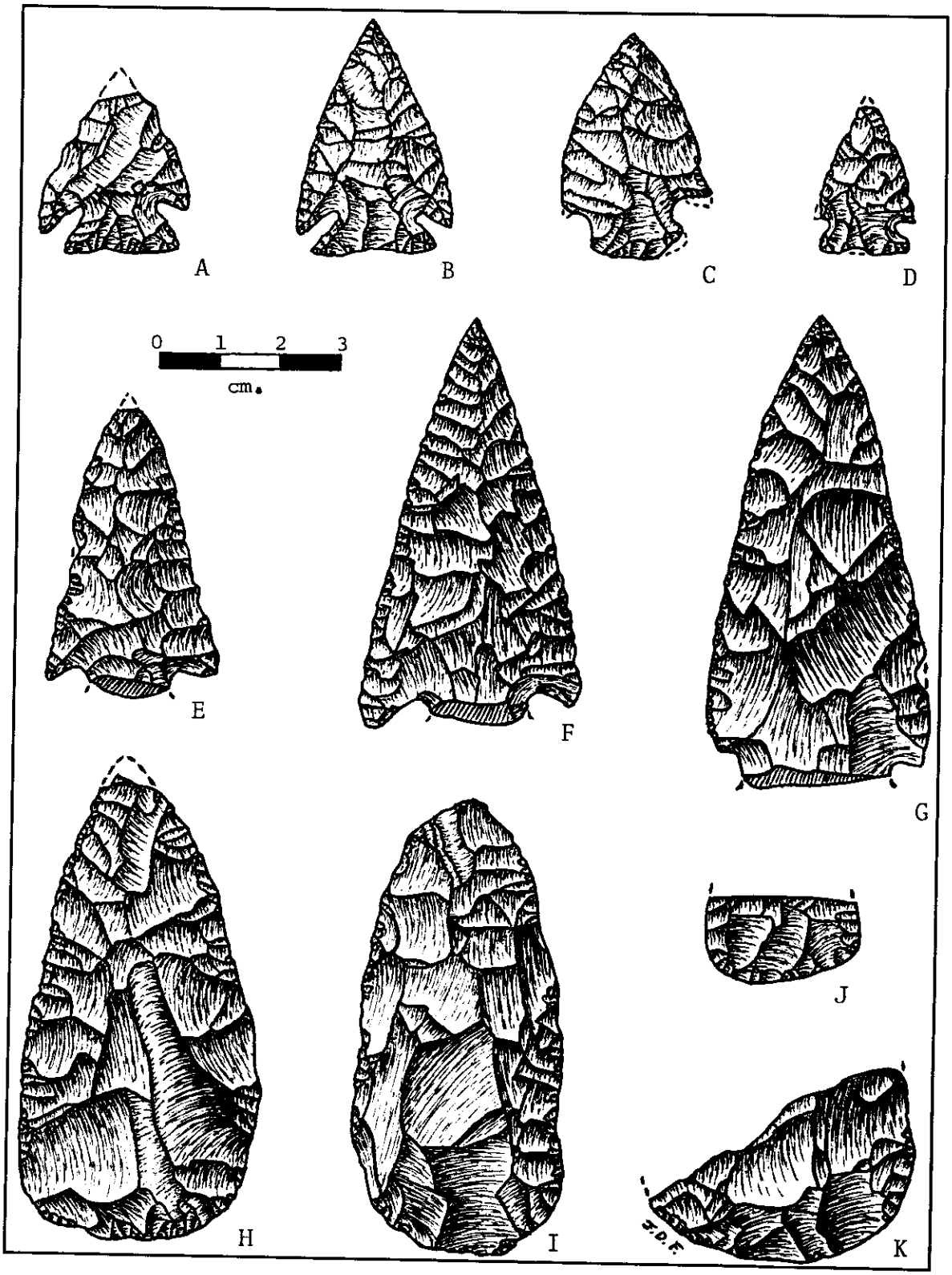

Figure 3. Projectile points and other bifaces from the Plains Woodland component at the Slough site, 14JO402-A. A, H-J. Artifacts from test squares. B-G, K. Artifacts from surface and plowzone.

seeds (Adair, personal communication 1994). *Chenopodium* sp. is an annual that was often used by Archaic people in the Great Plains as a food source (Adair and Feagins 1986:12-15). Although no diagnostic tools were recovered at this depth, the ^{14}C date possibly reflects a quite late Nebo Hill phase or slightly later occupation in area A. In Areas B and C of the site, a number of Nebo Hill points were recovered from the surface of the terrace edges (Wetherill 1993; Feagins 1993a).

The oldest artifact is a projectile point that was, strangely enough, obtained from the stripped off plowzone. Considering funding and time limitations, a road grader and operator were furnished by the city of Overland Park to strip off the plowzone in an effort to locate subsurface features. The plowzone was removed solely within the area slated to be destroyed by the street relocation project. The remainder of the site was not disturbed with the hope that future archeological research could be conducted in those areas. Unfortunately, only soil stains from old rodent burrows and tree roots were encountered. No cultural features were identified. In the backdirt from the plowzone stripping activity, the late Paleoindian point was found by one of our volunteers, avocational archeologist James Roberts. The point was freshly broken, apparently by the road grader.

This Plano-like point (Figure 4) is similar to the Dalton type. There are several point subtypes within the Dalton tradition. Dalton occupations are generally considered somewhat transitional between the Paleoindian and Early Archaic periods. While the Dalton people's way of life is probably more akin to the hunting/gathering people of the Early Archaic period, the Dalton point morphology and its manufacturing techniques are similar to other late Paleoindian points. This Plano-like point is made of a nonlocal white to light gray chert, containing quite small crinoid and possibly foraminifer fossils. The basal edges of the point were dulled by grinding. Presumably this was done to reduce the danger of cutting the binding where the point was attached to a shaft. The point is slightly "eared" at the base, which forms the widest part of the artifact. It has a maximum thickness of 8.1 mm and a maximum width of 29.5 mm. Its estimated length prior to breakage is approximately 70 to 80 mm. The concave base is 3.3 mm deep. No fluting or serrations are present.

The surprising discovery of the Dalton-like point from the upper portion of the much later Plains Woodland component raised a number of questions. Was a deeply buried late Paleoindian horizon present at the site? If so, the Slough site becomes of utmost significance. Could the point have been brought to the surface by power equipment digging nearby trenches for water, gas, and drainage pipelines? Or was the point simply found elsewhere many centuries ago and retained by the Plains Woodland or Late Archaic peoples living at the site?

To answer these and other questions, a request was made of the city of Overland Park to furnish a backhoe and operator, so that a deep soil profile could be examined. Dr. Rolfe Mandel, a geomorphologist from the University of Nebraska-Omaha, described the terrace soil

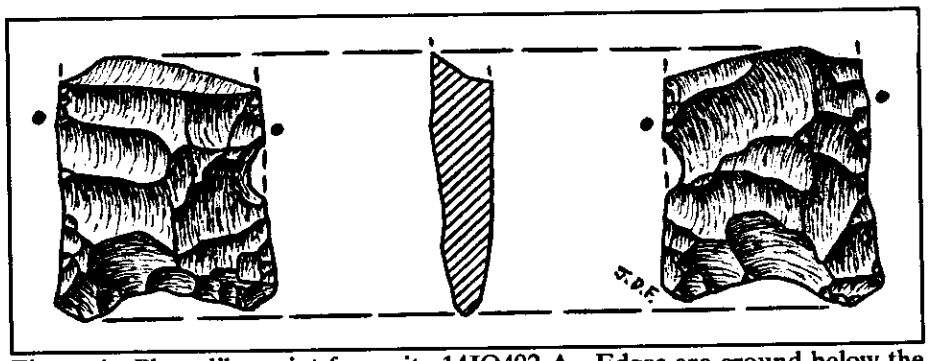

Figure 4. Plano-like point from site 14JO402-A. Edges are ground below the dots. Artifact is shown at actual size.

present at the site. The site contains the Gunder member of the DeForest formation (Mandel 1993). His research casts considerable doubt that the soil at site 14JO402-A is of sufficient age to contain a late Paleoindian level. He feels that the early construction trenches would have been far too shallow to have a cultural component of that antiquity. The evidence to date suggests that the late Paleoindian point was likely found and brought to the site by an individual from the Woodland period. Some 8,700 years after it was originally lost, this style of point would have been quite a curiosity to Plains Woodland people. Their "heirloom," now approximately 10,000 years old, is even more of a curiosity today.

It should also be noted that several private collections from the site have been donated to the museum. Everyone benefited by the tremendous cooperation given by many institutions and individuals. Based on the surface collections and testing excavation, much useful information, which otherwise would have been lost, was obtained from site 14JO402. The city of Overland Park, as well as other institutions and individuals involved with this research, are to be especially commended.

KING HILL (ONEOTA) SITE

A residential area on the Missouri River bluffs at King Hill in southern St. Joseph, Missouri, was the location of recent archeological research by the museum. A cultural resource assessment on a small lot was directed by Jim Feagins for the St. Joseph Housing Authority. This property is proposed for purchase with HUD funding. Although slightly outside the area plotted on the 1968 National Register of Historic Places nomination form for the King Hill site, this project location was found to be a part of the Oneota occupation. While historic materials, a variety of animal bones, lithics, and shell-tempered pottery were recently recovered, the most interesting artifacts were a native-made gun flint and a broken catlinite tablet (Feagins 1994b, 1994c).

Thought to have been occupied during the first portion of the 1700s, the King Hill site, 23BN1, is generally considered by most archeologists to have been a Kansa village (Henning 1977). An excavation by the University of Nebraska in 1972 and a joint excavation by the Saint Joseph Museum and the University of Missouri-Columbia in 1966 (Shippee 1967:5), occupied a locus approximately 160 meters north of the current area of investigation. The first excavation was greatly aided by volunteers from the Saint Joseph Archaeological Society.

The faunal remains and pottery from these excavations have been the subject of two masters theses (Raish 1979; Ruppert 1974). The floral remains from 23BN1 have been analyzed (Blake and Cutler 1982; Cutler and Blake 1968). The lithic material and trade items from the site in the museum's collection have recently reverted from an extended loan to Dr. Dale Henning.

At the time the King Hill site was occupied, the Oneota people were beginning to receive some trade goods from back east. As trade materials trickled to them, through other Indian groups and/or directly from French traders, the acculturation process that so dramatically changed the culture of the plains tribes was commencing on King Hill. This site contains a record of an ancient people which, unbeknown to them, were just beginning a period of tremendous cultural change. Among the trade materials found on the King Hill site were Venetian blue glass beads, hundreds of tiny "seed" beads of various colors, metal tubes, tinklers, a finger ring, and scraps of brass or copper (Fisher, personal communication 1994). The trade goods were chiefly items of decoration. No gun parts were found, that is until the recently discovered gun flint.

Needless to say, a flintlock gun could not function without a flint to strike the frizzen of the gun, creating the spark to ignite its powder. When a gun flint broke or wore out, it could be replaced by trade. With the Indians' heritage of flintknapping, it is no wonder that they often made their own replacements from the local cherts. This probably accounts for the presence of the gun flint recently found on King Hill.

The gun flint is of a size which suggests that it was intended to be used in either a rifle or

pistol (see Woodward 1960:39). Pistols, rifles, muskets, etc. usually had different ranges of gun flint sizes. However, I suspect that the size of a gun flint was not a critical factor to the Oneota in determining the type of flintlock with which it could be used.

The gun flint is made from a flake of medium gray chert of a type abundantly found on this and other local sites. The dorsal surface of the flake forming the gun flint contains retouch on all four edges (Figure 5). The

Figure 5. Native-made gun flint from the King Hill (Oneota) site, 23BN1. Artifact is shown at actual size.

ventral surface has a thinning flake scar on the bulb of force and retouch on two of the edges. It has been deliberately fashioned in this shape. It is unbroken and has experienced little, if any, wear. Its mass is 2.3 grams. The artifact is 24.0 mm long, 21.3 mm wide, and 4.1 mm thick. Its size and general shape correspond nicely with other native-made gun flints with which the author is familiar (Feagins 1976), but it is thinner than the majority. Ted Hamilton (T. Hamilton to J. D. Feagins, letter, 8 April 1994), author and expert on trade guns, writes about this artifact as follows:

> It is thin, but it is surprising how much beating a flint can take in a lock. This looks like it is in mint condition. Judging from the back, it looks like a spall of European manufacture, but the face appears to be Indian. If you can identify the chert as being local, I would say it is of Indian manufacture, made for a trade gun and dates from the mid 1700's. Of course, it could have been made by a white man, but I imagine that would be a long odd to bet on.

At present, one cannot be certain just when the gun flint was lost. It seems highly probable that it is of Indian manufacture. It should not be surprising that the Oneota people on King Hill had a few (but not many) trade guns in their possession. While answering a few questions, its finding has also generated additional ones. Of course, that is a great part of the enjoyment of archeological research.

SUMMARY

This article briefly describes part of the archeological projects undertaken by the Saint Joseph Museum during the past year. Features were identified, and well over 10,000 cultural items have been, or are in the process of being, analyzed. The data and interpretations concern various cultural resources, including Euroamerican farmsteads, a fur trading post, a protohistoric Oneota (Kansa) village, a prehistoric rock- and earth-filled mound, and a number of Woodland and Late Archaic habitation sites. At this writing (May 1994) all projects have been completed except for the excavation of the Robidoux fur trading post and the research at site 14JO402. This latter project will be finished after the museum receives authorization to finalize the report.

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KANSAS FOLSOM EVIDENCE

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The Kansas Anthropologist 15(2):31-43

Information on 33 Folsom projectile points and fragments from Kansas is presented in this study. A critical evaluation of previous Folsom point records is provided, as well as information on previously undocumented specimens. Lithic materials represented by Kansas Folsom points include sources from Colorado and Texas as well as Kansas. This report is intended to encourage people to report fluted point finds to help build a data base that will aid further study of the early prehistoric period in the Kansas region.

THE FOLSOM RECORD IN KANSAS

Folsom sites have been documented across much of the Great Plains region including Oklahoma, Colorado, and Nebraska (Bement 1993; Greiser 1985; Myers 1987). To date no unequivocal Folsom sites have been reported in Kansas, although 12 Mile Creek, located in Logan County and excavated in 1895 (Williston 1902), has been suggested to be of Folsom or Clovis age (Brown and Logan 1987; Howard 1935:144; Rogers and Martin 1984; Wedel 1959:88-89, 622). Two radiocarbon dates on bone suggest an age of about 10,300 B.P. for the site (Rogers and Martin 1984), which is consistent with numerous Folsom site dates (Haynes 1993). The available photograph of the projectile point indicates a fluted point (possibly made of Alibates judging by the light and dark banding) with a reworked tip. The point could represent a Clovis or Folsom, but since it was lost almost 100 years ago, a detailed evaluation is not possible. Recent re-study of the 12 Mile Creek collection has contributed new information about the bone assemblage (Hill 1994; Hill et al. 1993), but for the present I consider the 12 Mile Creek cultural assignment unresolved.

Other Folsom evidence from Kansas is limited to surface finds of a relatively few projectile points. A total of 33 specimens are included here (Tables 1 and 2). These have been reported from the extreme southwestern to northeastern corners of the state (Figures 1 and 2). Howard (1935:115, 119) was the first to report a Folsom point or points from southwest Kansas. Although no specific provenience or illustrations are provided, the find spot is believed to have been Seward County. Howard (1939:278) later refers to a white quartzite Folsom point from southwest Kansas (shown here as a quartzite point from Seward County). Fischel (1939:251) also notes this record. Shippee (1953:Figure 3) and Solecki (1953:16, Figure 6) report an isolated Folsom from Marshall County (14MH75). Wedel (1959:536-537, 685, Plate 15h, i) describes and illustrates six Folsom points, three from Doniphan County and three plus a Midland point from Seward County. Wedel's Seward County points are Alibates, not quartzite, and so are distinct from that reported by Howard. Yaple (1968) reviews Wedel's information and reports two additional Folsoms, one base from Jefferson County and one tip from Barton County. Two Folsom points have been reported from the Coffey site (14PO1) in northern Pottawatomie County (Ziegler 1976:34, Figure 1a; Schmits 1980:84-85, Figure 42a; Yaple 1969). Yaple (1969) made detailed records on three Kansas Folsom points including the two from the Coffey site and one additional point from Marshall County. Lippincott (1976:91-93) notes the occurrence of a Niobrara jasper Folsom tip from 14ML11 in the Solomon River drainage in western Mitchell County.

Glover (1978) studied seven Folsom points from southwestern Kansas, all but one of which was unbroken. Glover (1978:31) specifically chose complete specimens for his comparative statistical analysis. The broken Folsom base from Morton County is included in the present

Table 1. Non-Metric Data on Kansas Folsom Points.

Record	County	Site	Portion	Material	Source
K1	Doniphan	Gilmore	TP	UC	Wedel 1959
K2	Doniphan	Troy	CO	UC	Wedel 1959
K3	Doniphan	Leona	CO	UC	Wedel 1959
K4	Pottawatomie	14PO1	CO	UC	Ziegler 1976
K5	Seward	Liberal	BA	AL	Wedel 1959
K6	Seward	Liberal	MD	AL	Wedel 1959
K7	Seward	Liberal	BA	AL	Wedel 1959
K8	Barton	14BT402	TP	UC	Yaple 1968
K9	Jefferson		BA	UC	Yaple 1968
K10	Wallace	Sharon	BA	AL	this paper
K11	Finney		BA	QZ	this paper
K12	Finney		TP	QZ	this paper
K13	Finney		MD	AL	this paper
K14	Marshall	14MH75	CO	FL	Shippee 1953
K15	Seward	Childs	CO?	QZ	Howard 1935
K16	Morton		BA	CL	Glover 1978
K17	Pottawatomie	14PO1	CO	UC	Schmits 1980
K18	Marshall		CO	FL	Yaple 1969
K19	Pottawatomie		CO	FL	this paper
K20	Sherman		CO	NJ	this paper
K21	Kearny?		TP	AL	this paper
K22	Kearny?		TP	FL	this paper
K23	Kearny?		TP	FT	this paper
K24	Kearny?		TP	CL	this paper
K25	Kearny?		MD	AL	this paper
K26	Kearny?		CO	QZ	this paper
K27	Kearny?		CO	FW	this paper
K28	Sherman	House	BA	NJ	this paper
K29	Finney	TM1	TP	FT	this paper
K30	Finney	TM	EG	ED	this paper
K31	Finney	TM2	BA	UC	this paper
K32	Decatur		CO	FT	this paper
K33	Mitchell	14ML11	TP	NJ	Lippincott 1976

Portion: CO=complete, TP=tip fragment, BA=basal fragment, MD=midsection, EG=edge of blade fragment.

Lithic Materials: UC=unidentified cherts, AL=Alibates, QZ=fine quartzites, FL=Florence B and other Flint Hills cherts, CL=chalcedony, FT=Flattop chalcedony, FW=fossil wood, NJ=Niobrara jasper, ED=Edwards chert.

Table 2. Available Metric Observations for Kansas Folsom Points.

Record	Length	Width	Base Width	Thickness	Fluted Thickness	Basal Depth
K1	-33.00	-22.00	--	--	--	--
K2	43.00	20.00	--	4.00	--	--
K3	34.00	17.00	17.00	--	--	--
K4	38.40	21.20	20.00	5.40	--	4.70
K5	-29.50	23.00	19.50	--	--	--
K6	-31.00	23.50	--	--	--	--
K7	-28.00	23.00	19.00	--	--	--
K8	--	--	--	--	--	--
K9	-22.00	21.50	19.00	--	--	5.00
K10	-24.90	19.40	17.40	4.40	3.00	--
K11	-26.60	23.60	21.10	4.40	3.10	--
K12	-29.10	24.80	--	5.10	3.60	--
K13	-1.76	20.00	--	4.10	3.10	--
K14	56.00	25.00	--	5.00	--	--
K15	--	--	--	--	--	--
K16	--	21.00	16.60	4.00	--	--
K17	36.70	21.20	16.10	5.10	--	3.60
K18	37.50	21.90	20.30	3.10	--	4.10
K19	47.50	23.10	21.50	5.20	3.90	--
K20	46.60	24.30	20.50	5.00	3.70	4.60
K21	-22.40	-20.10	--	2.40	2.10	--
K22	-23.30	-20.30	--	3.30	2.70	--
K23	-36.20	21.00	--	4.30	2.90	--
K24	-38.60	22.60	--	4.00	2.70	--
K25	-16.10	17.00	--	4.80	4.10	--
K26	33.40	19.90	16.10	5.50	4.10	2.70
K27	29.30	20.60	19.50	3.90	2.90	4.70
K28	-32.50	20.30	20.00	4.70	3.40	3.10
K29	-33.80	23.50	--	4.80	3.60	--
K30	-17.00	-14.10	--	2.60	2.00	--
K31	-23.80	-23.50	21.60	4.10	2.80	4.50
K32*	38.90	20.10	18.50	4.70	4.50	2.30
K33	--	--	--	--	--	--

Measurements are in mm. Length, width, and thickness are maximum measurements. A minus sign indicates measurements on broken specimens. Fluted thickness is taken in the center of the point at one cm above the base or in the center of the proximal end on pieces lacking the base.

*Specimen K32 is a flake blank, pseudo-fluted point.

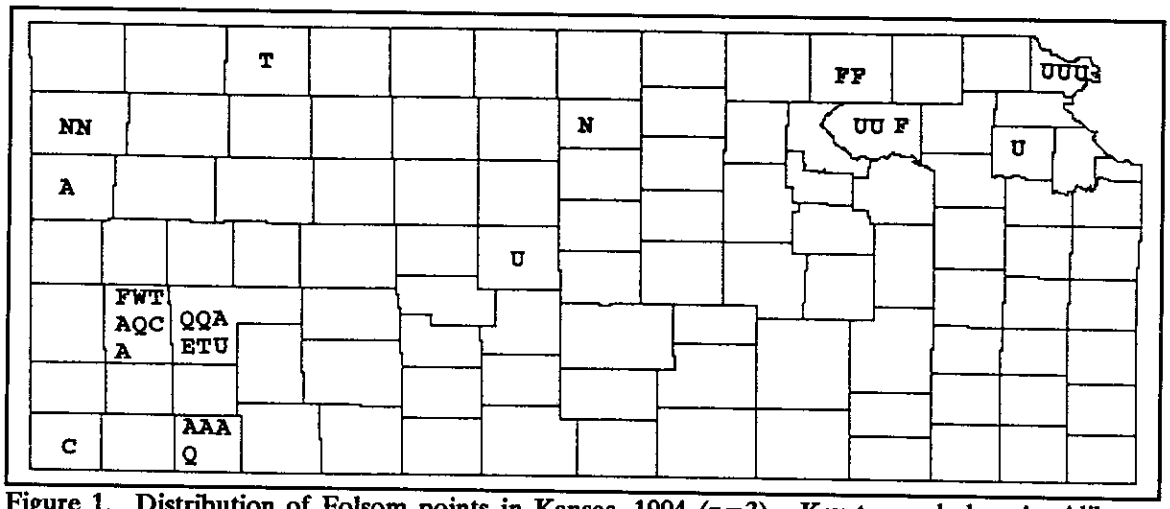

Figure 1. Distribution of Folsom points in Kansas, 1994 (n=3). Key to symbols: A=Alibates, C=unknown cherts, E=Edwards, F=Flint Hills cherts, L=chalcedony, N=Niobrara jasper, Q=quartzite, T=Flattop and related material, W=fossil wood.

inventory, but the six complete specimens are not. Several of these exhibit traits characteristic of recent "Folsom" point replicas made by a modern flintknapper from southeastern Colorado who produced hundreds of Folsom replicas. These are commonly encountered in the private and museum collections in Colorado, Kansas, New Mexico, Texas, Oklahoma, and elsewhere. Some of the complete Folsom points reported by Glover are certainly of recent manufacture, so I have excluded them from this summary. The use of modern replicas strongly influenced the metric data used in Glover's analysis and explains why his sample was distinctly different from all other Folsom samples (from Colorado, New Mexico, Oklahoma, and Texas) used in his study. Identification of modern replicas presents significant methodological problems and analytical concerns in documentation of collections and for regional studies of Folsom archeology.

I have a similar concern for the authenticity of a complete and relatively thick Alibates Folsom point that Rogers (1979:6, Figure 2a) reports from 14CF335 in Coffey County, southeastern Kansas. This artifact and the southwest Kansas pieces, which are also thicker than usual, need to be restudied and reevaluated before they are included in the Kansas Folsom data base. Folsom points that are complete, manufactured from Alibates flint, and thicker than 5 mm should be carefully evaluated as to their origin.

Stein (1984) notes the occurrence of Folsom points in Kansas but does not provide information on specific Folsom pieces. Brown and Logan (1987:190, Figure 6) list 16 Folsom records for Kansas, based on previous publications and state site file records, including the 7 points reported by Glover and the Coffey County point. They do not, however, include all the specimens reported by Wedel (1959). In addition to previously reported specimens, Brown and Logan (1987:Table 2) note the occurrence of Folsom points from Leavenworth and Greeley counties, but no specific information on these points is given, and none is available in the site files. They also include a question mark with the Greeley County record, indicating some uncertainty about the specimen. Due to the lack of any specific information, these two cases are not included in this study. Brown and Logan, like Yaple, attribute the uneven recording and distribution of Folsom artifacts to the limited efforts to find early sites or to document and study avocational collections. It is interesting to note, however, that the study of avocational collections from the lower Kansas River Basin has so far not produced Folsom evidence, even though Clovis and Dalton artifacts are well represented in the

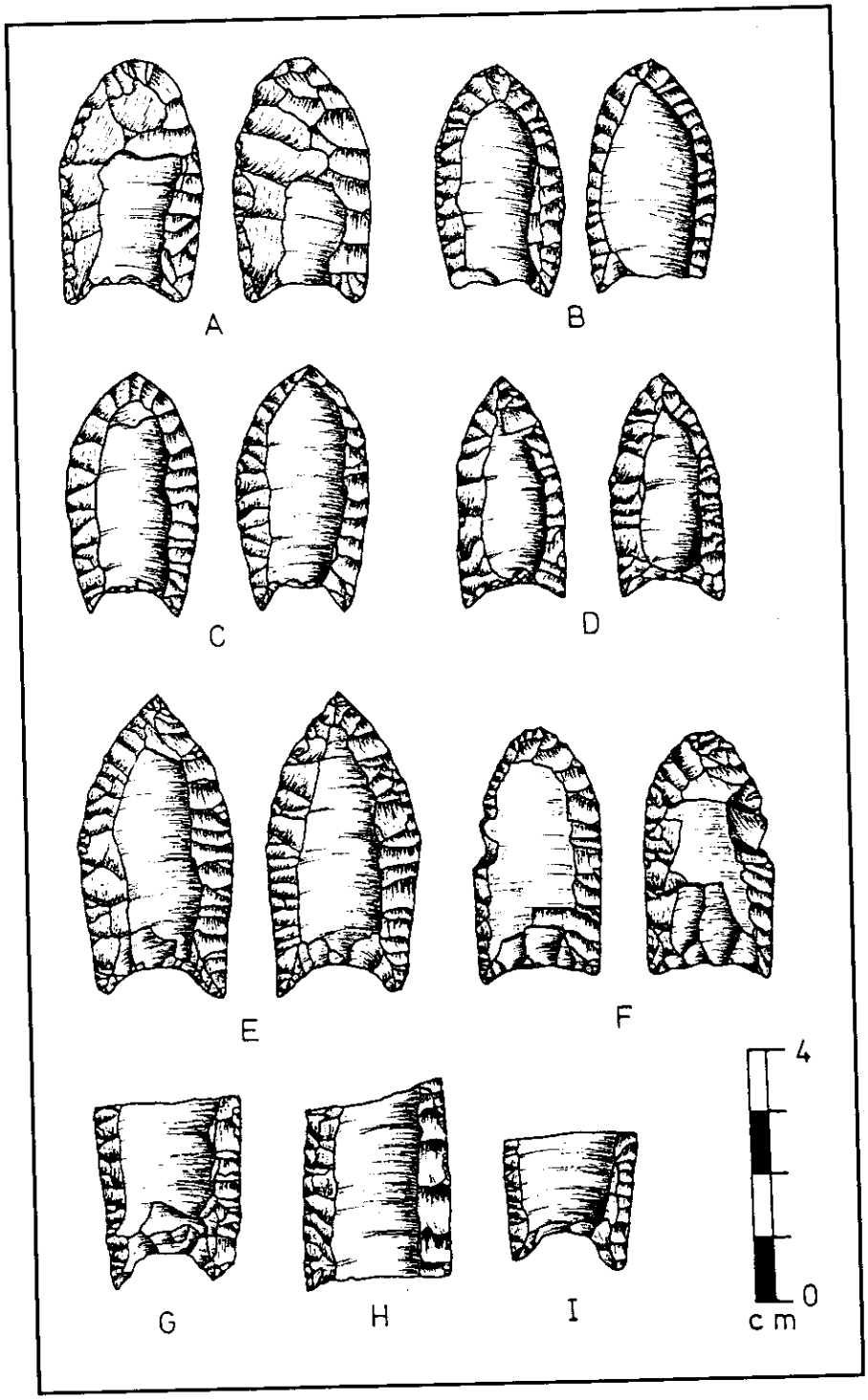

Figure 2. Folsom points from Kansas. A: Marshall County (K18); B-C: Pottawatomie County, 14PO1 (K17, K4); D: Doniphan County (K3); E: Sherman County (K20); F: Decatur County (K32); G-H: Seward County (K5, K6); I: Jefferson County (K9). Specimens A, B, and C are redrawn from Yaple 1969; D, G, and H are redrawn from Wedel (1959:Figure 96), and I is redrawn from Yaple (1968, original drawing by Ann Johnson). Specimen F is made from a flake and unfluted. K numbers refer specimens to Tables 1 and 2.

area (Rogers and Martin 1983; Wetherill 1991). This may indicate limited Folsom activity in that locality. A similar pattern exists in eastern Nebraska (Myers 1987) and eastern Oklahoma (Hofman 1987).

ADDITIONAL KANSAS FOLSOM OCCURRENCES

Recent study of private and museum collections in western Kansas has produced information on 18 previously undocumented Folsom points from the area (Tables 1 and 2, Figure 3). The provenience information on these varies from quite good to poor. These recently recorded points are from Decatur (1), Finney (6), Kearny (7), Pottawatomie (1), Sherman (2), and Wallace (1) counties and bring the total reported Kansas Folsom records to 33, not including the 6 complete specimens reported by Glover (1978) or the Coffey, Leavenworth, and Greeley county pieces. Site specific provenience information is lacking for the Kearny County pieces, which could come from locations slightly further east or west in adjacent Finney or Hamilton counties. These points were found in the sand hills area south of the Arkansas River. This incomplete provenience information is unfortunate, but at the scale of a larger regional study (e.g., comparing western and eastern Kansas samples or Texas and Kansas samples) the problem is of less significance.

Although the sample is small, some interesting patterns are evident, and it is obvious that we have much to learn about the activities of Folsom people in the Kansas area. At present there are no Folsom preforms documented, although tools such as spurred end scrapers and flake gravers have been found at localities with Folsom points and are possibly related to Folsom assemblages. The lack of campsite, lithic production, and retooling evidence probably reflects both the less recognizable nature of these pieces and the limited systematic effort to seek them out and study them. We have yet to document a site, assemblage, or component in Kansas that can be attributed to activities of Folsom people. The most common diagnostic Folsom artifact forms to occur on campsites are generally those that are least likely to be recognized, such as channel flakes, preform fragments, gravers, and spurred end scrapers. Rechecking collections from sites that are already known to have produced Folsom points provides a starting point for identification of Folsom assemblages in Kansas. Variation in Folsom points can also be dramatic and depends on factors such as amount of reworking, stone type, circumstances of manufacture, and individual knapper variation (Hofman 1992). Unfluted and heavily reworked Folsom points are common elements in Folsom assemblages and often go unrecognized. Some well illustrated and helpful sources on Folsom assemblages include those by Frison (1991; Frison and Bradley 1980; Frison and Stanford 1982), Hofman (1993), and Wilmsen and Roberts (1978). It is also important to keep in mind that Folsom assemblages are often quite small and may consist of only a few pieces (Hofman and Ingbar 1988). Cooperation between avocational and professional archeologists is essential if we are to document these sites and assemblages. This will be the first step in learning more about the lifeways of Folsom people in the Kansas region.

DISCUSSION

The distribution of Folsom points extends over most of the state (Figure 1), but with only minimal evidence from the central and southeast areas. As noted in previous studies, the current distribution is likely primarily a reflection of the uneven research and reporting. If information from Oklahoma and Missouri is an indication, however, we might expect relatively little Folsom evidence from extreme southeastern Kansas. The occurrence of Folsom points in northeastern Kansas complements that noted for northwestern Missouri (Chapman 1975).

A variety of lithic material is represented by the Kansas Folsom sample (Table 3, Figure 4). Seven Folsoms (21.2%) are manufactured from Alibates from the Texas panhandle, four (12.1%) are fine quartzites (perhaps derived from bedrock or gravel sources in the Oklahoma Panhandle, southeastern Colorado, or southwest Kansas area), four (12.1%) are probably Permian cherts from the northern Flint Hills, three (9.15%) are Niobrara jasper (with sources in northwestern Kansas and southwestern

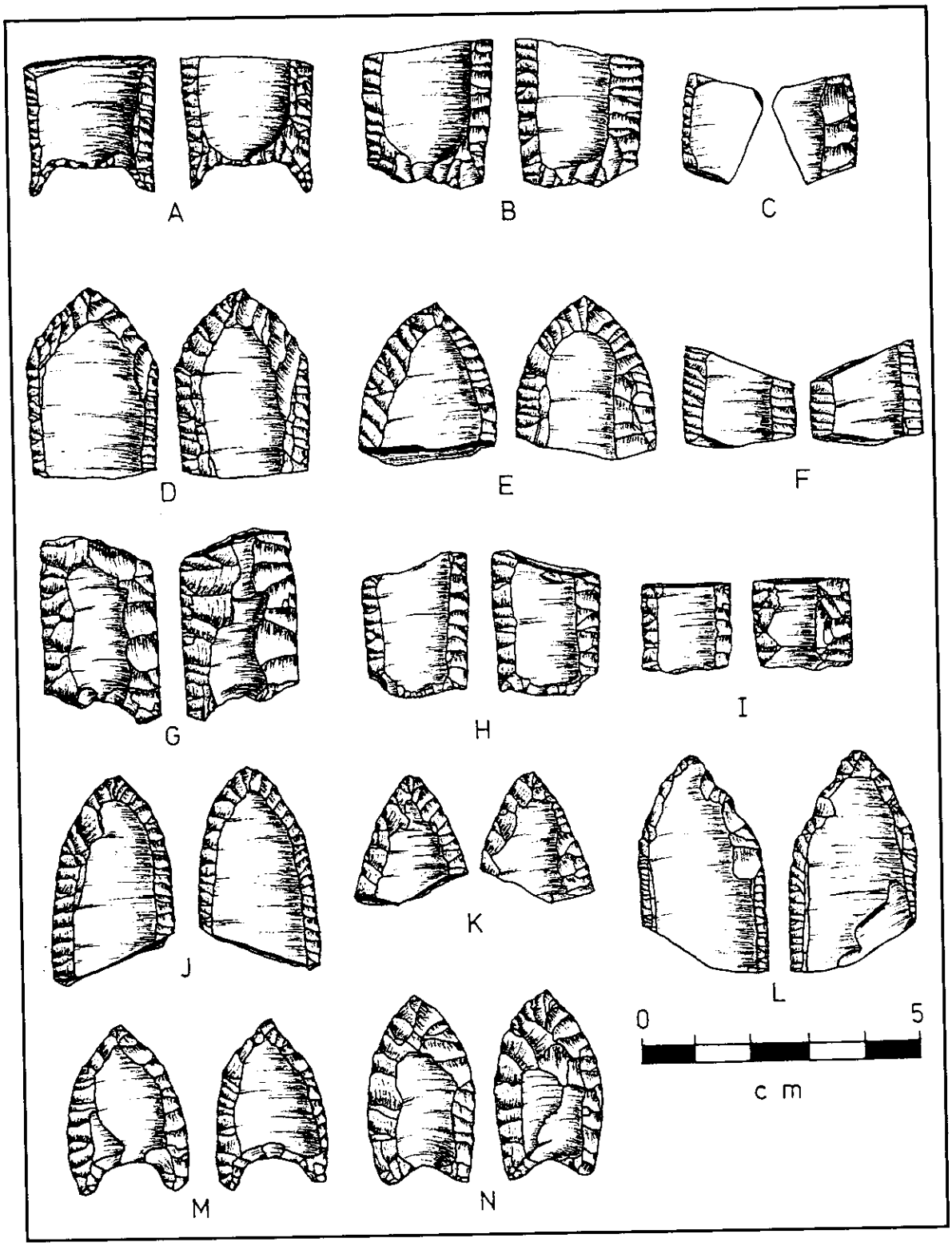

Figure 3. Folsom points from Kansas. A-F: Finney County; G: Sherman County; H: Wallace County; I-N: Kearny County. Specimen numbers for A-N are K31, K11, K30, K29, K12, K13, K28, K10, K25, K23, K22, K24, K27, and K26, respectively. N (K26) may be a small Clovis point.

Table 3. Cross Tabulation of Kansas Folsom Point Condition and Lithic Material Types.

	Point Condition/Fragment Type				
Material Type	Complete	Tip	Blade/Edge	Base	Totals
Alibates	0	1	3	3	7 (21.2%)
Quartzites	2	1	0	1	2 (12.1%)
Permian*	2	1	0	0	3 (9.1%)
Flattop	1	2	0	0	3 (9.1%)
Niobrara	1	1	0	1	3 (9.1%)
Chalcedony	0	1	0	1	2 (6.1%)
Fossil Wood	1	0	0	0	1 (3.0%)
Edwards Chert	0	0	1	0	1 (3.0%)
Unidentified	5	2	0	2	9 (27.3%)
Totals	12 (36.4%)	9 (27.3%)	4 (12.1%)	8 (24.2%)	33

*Permian includes Florence B and northern Flint Hills cherts.

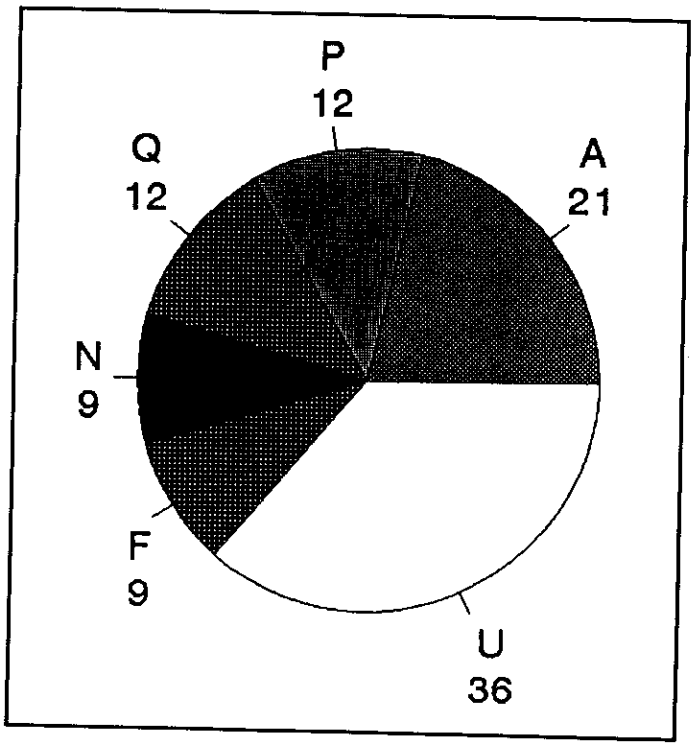

Figure 4. Lithic material types of Kansas Folsom points by percentage, 1994 (n=33). Key to symbols: A=Alibates, P=Permian, Q=quartzites, N=Niobrara, F=Flattop, U=other.

Nebraska), three (9.1%) are Flattop chalcedony from northeastern Colorado, two (6.1%) are chalcedony perhaps from eastern Colorado or gravel sources, one (3%) is fossilized wood probably from eastern Colorado, and one is Edwards chert from central Texas. Eight points (24.2%) are unidentified or are cherts from unknown sources.

Three Midland points from southwestern Kansas include two of Alibates and one of chalcedony. We have much yet to learn about lithic resource use patterns during Folsom times in the region, but the common use of quartzite and the occurrence of Alibates, Edwards, Flattop, and Florence sources are of particular interest from a regional perspective. The limited occurrence of Niobrara jasper probably reflects the inadequate sample, especially from central and northwestern Kansas,and is expected to change substantially with further research. Niobrara is a common material for Folsom and Clovis points from Nebraska (Grieser 1985:65; Myers 1987) and is also known for specimens from Colorado and Oklahoma (Hofman 1990). Clovis points from the Diskau site in eastern Kansas are also made of Niobrara (Schmits 1987).

The condition and breakage of the Folsom sample is also indicated in Table 3 and Figure 5. Kansas Folsom points are represented by complete specimens (n=12, 36.4%), tips (n=9, 27.3%), mid- and edge-sections (n=4, 12.1%), and basal fragments (n=8, 24.2%). Complete points, tips, and blade fragments are commonly found in bone beds and may represent pieces lost during kill/butchering activities. Bases are common in camp, processing, and retooling locations, but are also well represented in some bone beds. The Sherman County Folsom base, for example, was found on a ridge on the east margin of a large playa and may represent a temporary camp, retooling, or hunting overlook situation where equipment was repaired and damaged projectile tips were resharpened or replaced with new points. The specific circumstances of most Kansas Folsom finds remain unreported, so potential associations with bone beds or other elements of tool or debitage assemblages are not known.

The appendix is a blank recording form that we use for documenting Paleoindian projectile point finds. It is reproduced here in hopes that individuals who have or know about Paleoindian

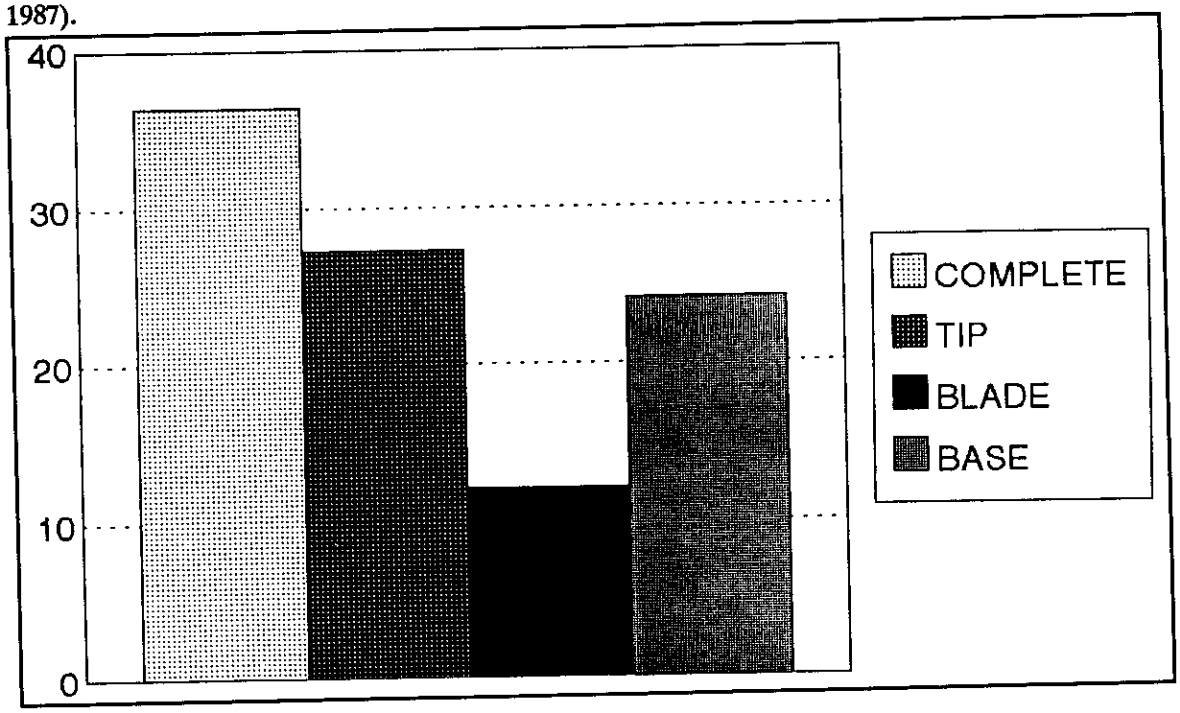

Figure 5. Kansas Folsom point fragment types by percentage, 1994 (n=33: 12 complete, 9 tips, 4 blade fragments, 8 bases).

point finds might make photocopies and submit whatever information they can. The forms need not be completely filled out to be of significance and useful. Remember that fragmentary points are as important as complete ones, and that it is impossible to study artifacts that we do not know exist. Information on find locations will be kept confidential, so please include at least the county of the find if known.

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APPENDIX

GREAT PLAINS FLUTED POINT SURVEY specimen data sheet 5/1/92 JLH
Date:_____ Recorder:_____ Spec. Number:_____ Type:_____
Collection of:_____
Specimen found by:_____ Date Found:_____
Find Spot--State:_____ County:_____ River system:_____
Site:_____ Legal:_____1/4S:____T:_____R:_____
Context:(field,pasture,road,streambed,terrace,upland,slope,excav)
_____
Type of Specimen: point--fluted/unfluted preform--fluted/unfluted
_____
Portion present: (complete, base, blade, tip, edge, channel flake)
_____
Lithic Material: (include translucence, color, texture)
_____
Ultraviolet response: LW/SW_____
Thermal alteration:_____
Abrasion/Patina:_____

Measurements (cm/in):
Length:_____Width:_____Basal Width:_____Thickness:_____
Fluted Thickness:_____ Basal Depth:_____ Weight:_____(gm/oz)
Flute A: length_____width_____; Flute B: length_____width_____
Flake Scars (per/cm):face_____edge_____; Stem Length:_____

Reworking: (tip/base/edge)_____
Flaking Pattern A:_____B:_____
Flake Blank: (Y/N)_____
Distal end of flute A: (extended to tip y/n)
removed by flaking:____hinged:____feathered:____missing:____
Distal end of flute B: (extended to tip y/n)
removed by flaking:____hinged:____feathered:____missing:____
Nipple: (present/absent/remnant)_____
Base outline:_____Edge outlines:_____
Edge Grinding A:_____Edge Grinding B:_____ Basal Grinding: _____
Photos: y/n, b&w, slides, color/ Draw specimen below or on back
Notes:

Return form to:
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BOOK REVIEW

Tales of a Shaman's Apprentice. MARK J. PLOTKIN. Viking Press, New York City, 1993. x + 318 pp., 1 map, 15 photographs, references, plant glossary. $22.00 (cloth). ISBN 0-670-83137-9.

Reviewed by Rose Marie Wallen, Lindsborg

Tales of a Shaman's Apprentice is a combination of adventure, travelogue, field research, social commentary, and educational digressions into the history and uses of medicinal plants. Dr. Plotkin relates how he was enticed into the field of ethnobotany by a colorful university professor in 1974. He subsequently received his Masters and Ph.D. degrees through his research among the Indian cultures of the northeast Amazon area.

Ethnobotany is the systematic study of how the people of a particular region use the local plants. The plants themselves make possible the traditional culture of a given locale, providing food, medicine, fibers, shelter, poisons, even sacred hallucinogens. The ethnobotanist not only studies the people and their uses of plants, but also collects and preserves examples to verify scientific classification and to provide material for laboratory analysis.

Through the centuries the results of practical experimentation and the conservation of traditional knowledge have been achieved by shamen through apprentices. The shamen (medicine men or women) selected apprentices to aid them, and to assure that their knowledge would be passed on. As Western culture overtakes the native ones, this knowledge is being lost, since no one is taking on these traditional roles. Only recently has it dawned on the scientific community that its synthetic drugs are not superior to natural ones, and there are yet hundreds of medicinal plants that are uninvestigated by Western culture. In the meantime native cultures are being eroded rapidly through contact, and the rain forest habitat of the curative plants is being destroyed at the rate of thousands of acres per day. Not accepting the irony that Western culture is willing to seize "new" knowledge from traditional cultures for self-gain and never return a penny to the people who give up the information, Plotkin viewed his research would, in the end, benefit the native people.

Plotkin returned again and again (nine times) to the rain forests of Suriname, Guyana, French Guiana, Venezuela, and northern Brazil, racing against time to harvest and record new plants before the rain forests' fragile ecosystems succumb to overdevelopment, and before the Indians abandon their own cultures. By first demonstrating his respect and gaining their confidence, he gathered information from the Creoles of French Guiana, the Maroons, Tirió, and Wayana of Suriname, the Waiwai of Guyana, and the Yanomamo of Venezuela. Not only was the documented information returned to these people for use in their own village schools and the new shaman apprentice programs, but a pharmaceutical company was established that earmarks a percentage of the profits from new pharmaceuticals for the indigenous peoples. Also, funds are given to their national governments to support establishment of national forest preserves. Other drug companies and nature conservancies have since followed suit.

From coffee and bananas to heroine, codeine, and quinine, many of the products we take for granted were discovered by native people of the tropics among the 60,000 species of plants that thrive there. Among the newer promising leads are the rosy periwinkle, which is the source of anti-cancer alkaloids, a tree extract code-named SP303 for treating viruses causing herpes, flu, and respiratory conditions, and a kind of rubber tree containing prostratin, which appears to protect healthy cells from AIDS. If destruction of the rain forest laboratory could just be halted, advances in medicine would surely blossom.

Tales of a Shaman's Apprentice is a thoroughly entertaining and readable book, especially for those who get a vicarious thrill from vivid stories of adventure travel or borrowed satisfaction from research well done.

ABOUT THE AUTHORS

Jim D. Feagins
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Prior to his association with the Saint Joseph Museum, Jim served as archeologist for the Kansas City Museum from 1976 to 1990. Also this is his twenty-ninth year of teaching science for Consolidated School District #4 in Grandview. Jim received a B.S. in Education from Kansas State College at Pittsburg in 1965 and a M.N.S. degree from the University of Oklahoma in 1973. Active in promoting archeological education, he is President Emeritus of the Missouri Archaeological Society. Jim is a life member and former officer of the KAA. He has over 200 articles, reviews, and reports in print. His primary area of research interest concerns the prehistory of the eastern Central Plains with a focus on the ceramic period.

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Marlin is a special projects archeologist with the society's highway archeology program. A native of Washington County, Kansas, he holds a Master of Arts in anthropology from the University of Kansas. Among his research interests are the history and development of Central Plains archeology. His Masters thesis was recently published as KAA Bulletin Number 2, *A Keen Interest in Indians: Floyd Schultz, The Life and Work of an Amateur Anthropologist*. Marlin is a member of the KAA.

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Jack is an assistant professor in the Department of Anthropology at the University of Kansas. He attended college at the University of Oklahoma, the University of Wyoming, and the University of Tennessee and received his Ph.D. from the latter in 1986. Since then, he has conducted archeological field work in the western portions of Oklahoma, Texas, and Kansas with an emphasis on the investigation of Paleoindian lifeways.

Ralph S. Solecki
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Dr. Solecki, a native Long Islander, moved to Texas after retirement from Columbia University. Previous to academia, he was a curator at the Smithsonian Institution, where he had also been an archeologist for the River Basin Surveys. His field work took him to various parts of the central and eastern United States, Alaska, and the Near East. He and his wife Rose, also an archeologist, are working on their backlog of data from Near Eastern sites.

Rose Marie Wallen
116 E. Mill Street, Lindsborg, Kansas 67456-2815

Rose Marie is a member of the Mud Creek Chapter of the KAA. She received a B.A. degree in anthropology from the University of Kansas. After graduating, she served in the Peace Corps in Nicaragua as a health and nutrition extensionist, during which time she studied the use of medicinal plants among campesinos. She and her family are presently restoring a historic home in Lindsborg and expect to have it listed on the National Register of Historic Places.

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BLANK, BERT	398 7TH ST	PHILLIPSBURG	KS 67661 IND
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BRENNEMAN, GREG	2378 EDWARD	SALINA	KS 67401 IND
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BRUNA, LISA	331 S 22ND ST	ATCHISON	KS 66002 IND
BRUNER, MICHAEL & ERIC	1002 PECAN	HUMBOLDT	KS 66748-1954 FAM

BRUNSELL, JANE R	223 S SECOND	LINDSBORG	KS 67456	LIF
BRUTON, JOANN	1228 MEYER DRIVE	SALINA	KS 67401	IND
BRUTON, LELAND R	1228 MEYER DR.	SALINA	KS 67401	STU
BRYAN, JEANNINE AND JERRY	BOX 22	BURDEN	KS 67019-0022	FAM
BURRUSS, JIM	1164 EAST 66TH ST	KANSAS CITY	MO 64131-1403	IND
BURTCH, SARAH	3214 MACVICAR CT	TOPEKA	KS 66611	IND
BUTTON, MR AND MRS ROBERT	ROUTE 3, BOX 169	GREAT BEND	KS 67530-4448	FAM
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CALDERWOOD, MIKE	6330 NW 78TH	TOPEKA	KS 66618	IND
CARR, MAXINE M	213 HORACE GREELEY AVE, APT #305	NORTON	KS 67654-2223	IND
CARTER, ROSANNE	331 SW QUINTON APT 1	TOPEKA	KS 66606	IND
CHAPMAN, CHRIS	#5 KINEER RD	WINFIELD	KS 67156	IND
CHAPMAN, DEAN E	3149 LAKEVIEW CIRCLE	LEAVENWORTH	KS 66048	LIF
CHENEY, NADINE	ROUTE 1, BOX 105	TRIBUNE	KS 67879	LIF
CLARK, RANDY A. AND JANICE	1124 ELM	OTTAWA	KS 66067	FAM
COBB, TOM AND DORIS	RFD, HC72, BOX 35	COLDWATER	KS 67029	FAM
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CONRAD, MARY	3900 N 55TH STREET	KANSAS CITY	KS 66104	IND
COOK, EVA C	16404 W 126TH TERRACE	OLATHE	KS 66062	FAM
CORMODE, FRANCIS AND BARBARA	1148 HIGHWAY 9 RR 1 BOX 125	LANCASTER	KS 66041	FAM
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COYKENDALL, SHIRLEY & ROBERT	619 CADDY LANE	WICHITA	KS 67212-4609	FAM
CRAIG, PATRICIA A	3734 SW PLAZA DR #204	TOPEKA	KS 66609	IND
CRIQUI, DR. ORVEL A	2027 NAISMITH DR	LAWRENCE	KS 66046-2662	LIF
CROWLEY, ED AND VIRGINIA	P.O. Box 269	BELOIT	KS 67420	FAM
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DAHLSTEN, PAUL AND NORMA	430 N. CHESTNUT	LINDSBORG	KS 67456	FAM
DALE, FRANK D	HC 69, BOX 26	COLDWATER	KS 67029	LIF
DANIEL, KATHERINE J	820 EAST 10TH AVE	WINFIELD	KS 67156	FAM
DANIELS, CELIA	1521 SW COLLEGE AVE	TOPEKA	KS 66604	FAM
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DAVIS, EILEEN	714 WABASH	TOPEKA	KS 66616-1442	CON
DAVIS, WILLIAM E	1013 N NINTH	ARKANSAS CITY	KS 67005	IND
DECKERT, LEON AND ELLA MAE	522 WEST IOWA	GREENSBURG	KS 67054	FAM
DEINES, WILLIAM E.	ROUTE 2 BOX 86	WAKEENEY	KS 67672	IND
DELKER, LOWELL	1108 FUNSTON	SALINA	KS 67401	FAM
DETRICH, KARL	538 W 5TH STREET, P.O.BOX 552	CHAPMAN	KS 67431	IND
DETRICH, PHIL	1067 CASTEC	SACRAMENTO	CA 95864	IND
DETRICH, VERNA	BOX 589	CHAPMAN	KS 67431-0589	LIF
DETRIXHE, SANDRA	RT 3 BOX 357	CONCORDIA	KS 66901	FAM
DICKINSON, SCOTT	12136 W 82ND TERRACE	LENEXA	KS 66215	LIF
DOBBS, DR EDITH	2935 WILLOW	HAYS	KS 67601	LIF
DREWS, WILLIAM R.	3111 FARMINGTON RD	HUTCHINSON	KS 67502-2439	IND
DUNCAN, DALE	210 N PEARL	PAOLA	KS 66071	IND
EASTERDAY, SUSAN	RT 1 BOX L-14	LUDELL	KS 67744	FAM
EITEL, HOWARD AND LELA	312 S MAIN	LINDSBORG	KS 67456-2616	FAM
ELLIS LIBRARY	UNIVERSITY OF MISSOURI-COLUMBIA	COLUMBIA	MO 65201-8291	IST
ELMORE, GEORGE AND KAY	817 KANSAS	LARNED	KS 67550-6778	FAM

EMERSON, CRYSTAL AND JARA	2519 SE IOWA	TOPEKA	KS 66605-1619 FAM
ERICKSON, GEORGE	3320 HARRISON	TOPEKA	KS 66611 IND
ERNST, WALTER AND LAVERNA	P.O.BOX 97	ENTERPRISE	KS 67441-0097 FAM
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FARRELL LIBRARY	KANSAS STATE UNIVERSITY	MANHATTAN	KS 66506 IST
FAUBION, JANE	723 BELL MEAD PLACE	LAWRENCE	KS 66046 IND
FEAGINS, JIM D.	13213 BENNINGTON AVE	GRANDVIEW	MO 64030 LIF
FERGUSON, PAUL M.	3815 E. 56TH PLACE	TULSA	OK 74135-4140 IND
FINNEY, MARLENE, MEGAN, & MATTHEW	1421 E 1ST ST	WINFIELD	KS 67156-1807
FISHER, TIMOTHY A	1620 SW COLLEGE APT 4	TOPEKA	KS 66604 IND
FITCH, WARREN H.	1016 WEST 1ST ST	CHANUTE	KS 66720 IND
FITZGERALD, BETTY AND CARL	524 N. HOBART	GLEN ELDER	KS 67446 FAM
FOGLER, FRANK AND ELLEN	1707 COUNTY LANE	ATCHISON	KS 66002-1006 FAM
FOLSOM, CHAINY J	329 CAMBRIDGE	KANSAS CITY	KS 66103-2201 CON
FOUST, MARYLIE	2722 SE LAKE TERRACE	TOPEKA	KS 66605 LIF
FRANK, ANITA	6362 SW 10TH ST	TOPEKA	KS 66615 IND
GABISCH, TIM	5316 CLARK DR	ROELAND PARK	KS 66205 IND
GENTINE, LYNN	PO BOX 13562	LAS VEGAS	NV 89112 IND
GEORGE, MIKE	604 WEST LINDEN STREET	OREGON	MO 64473 IND
GERMAN, LELA	915 BROOKSIDE DRIVE	COLBY	KS 67701 FAM
GHERE, SHAROL	RR 2 BOX 125	HARPER	KS 67058-9644 FAM
GHERE, TERRY JOHNSON	PO BOX 7	DANVILLE	KS 67036-0007 IND
GHISELLI, WILLIAM B	2306 WEST 79TH TERR	PRAIRIE VILLAGE	KS 66208-3840 IND
GIESEN, MYRA AND DAVID GRAHAM	1034 HILLTOP DR	LAWRENCE	KS 66044 FAM
GLICKLEY, CHRISTINE LABRUZZO	15823 W 143RD TERR.	OLATHE	KS 66062-2591 IND
GLYNN, JANET K.	101 FEESS CR	WAMEGO	KS 66547-1934 FAM
GOODDEN, DENNIS	4517 CEDAR RIDGE COURT	LAWRENCE	KS 66049 CON
GOODLOE, MEGAN	16515 METCALF	STILWELL	KS 66085 IND
GOODLOE, NEIL	16515 METCALF	STILWELL	KS 66085 IND
GOODLOE, SCOTT	12273 S STRANGLINE RD 31216	OLATHE	KS 66062 FAM
GRAVES, LOIS	3022 21ST STREET	GREAT BEND	KS 67530-2140 IND
GREITL, ANNE	1939 SW BELLE	TOPEKA	KS 66604 CON
GURNEY, HUGH AND DAPHNE	143 N FOUNTAIN ST	WICHITA	KS 67208 FAM
HANSON, MARLENE	704 S WASHINGTON	WELLINGTON	KS 67152-2249 FAM
HARMAN, AARON AND DARLA	317 W H	PHILLIPSBURG	KS 67661 FAM
HARRIS, MARCELYN	PO BOX 297	VALLEY CENTER	KS 67147-0297 IND
HARRIS, MATT	734 BUTLER	VALLEY CENTER	KS 67147 STU
HARRIS, MIRANDA	734 BUTLER	VALLEY CENTER	KS 67147 STU
HARTMAN, MICHELE D	21805 WEST 179TH	OLATHE	KS 66062 IND
HARVEY, ANNA	2017 NE QUINCY	TOPEKA	KS 66608-1748 STU
HAWLEY, MARLIN	120 W 10TH ST	TOPEKA	KS 66612 IND
HAXTON, PATRICIA	727 WOLF	CHENEY	KS 67025-8011 FAM
HEASTY, DONALD AND CAMILLA	1814 N. EDWARDS	WICHITA	KS 67203-1445 FAM
HEATH, MARVIN W	1515 JEWELL AVE	TOPEKA	KS 66604 IND
HEGEWALD, NADINE	RR 1 OWL CREEK	HUMBOLDT	KS 66748 IND
HEIDRICK, TARA	511 N WALNUT	BELOIT	KS 67420 IND
HEIMAN, ARVILLA	702 N CHESTNUT	BELOIT	KS 67420 IND
HENRY, JAROLD AND MARILYN	RT. 1 BOX 136	CHANUTE	KS 66720 FAM
HETT, JAMIE	R.2 BOX 294	MARION	KS 66861 IND
HIGGINS, JOE AND CHARLOTTE	734 NW 58TH	TOPEKA	KS 66617 FAM
HIGHFILL, KAY	[illegible] W 23RD TERR	LAWRENCE	KS 66046 IND

HIGLEY, STAN & DENISE	RR1 BOX 48	ATWOOD	KS 67730	FAM
HILL, RUTH AND GREG	7307 SW 25TH CT	TOPEKA	KS 66614	FAM
HILT, ANNE	710 N HERSEY	BELOIT	KS 67420	IND
HOGAN, JAMES	RT 4 BOX 6B	INDEPENDENCE	KS 67301	IND
HOHENSTEIN, RON	BOX 242	OSAWATOMIE	KS 66064-0242	IND
HOLTBY, JIM	P.O. BOX 87	ATCHISON	KS 66002-0087	IND
HORNER, NANCY	400 EAST KANSAS	ARKANSAS CITY	KS 67005-1243	INS
HOUGHTON, SUSAN	514 EAST 10TH	WINFIELD	KS 67156	IND
HOUSER, THOMAS HAIN	307 N JEFFERSON ST	PLAINVILLE	KS 67663-1813	IND
HOWELL, JEAN AND BILL	H-BAR RANCH ROUTE 1	COATS	KS 67028	FAM
HUSS, JAMES A.	317 N 15TH	ATCHISON	KS 66002-2214	IND
HUTCHCRAFT, TED	P.O. BOX 199 207 N KIRKWOOD	HIGHLAND	KS 66035-0199	IND
HYNSON, DOROTHY J	1942 N KANSAS	TOPEKA	KS 66608	IND
ISELI, GARY	210 12TH ST #15	CLAY CENTER	KS 67432	IND
JACKSON, GREG AND ALICE	2206 VILLAGE LN	SALINA	KS 67401-3798	FAM
JEWETT, WILLIAM R	4206 WEST 73RD STREET	PRAIRIE VILLAGE	KS 66208-2929	IND
JIRIK, DALE	1331 CALEDON ST	TOPEKA	KS 66611	IND
JOCHIM, MARK J	13400 LOMAS BLVD NE	ALBUQUERQUE	NM 87112-6251	IND
JOHNSON, ELMA M. AND MARK A.	110 SOUTH PINE	LINDSBORG	KS 67456	FAM
JOHNSON, J E	RT 3 BOX 142B	MCPHERSON	KS 67460	STU
JOHNSON, NELL	P.O. BOX 912	GREENSBURG	KS 67054	IND
JOHNSON, PAUL AND ROBIN	ROUTE 1 BOX 80	GYPSUM	KS 67448	FAM
JONES, PAT	14623 W 83RD TERR	LENEXA	KS 66215	IND
JUSTUS, EARNEST W.	RR #1 BOX 1	DEKALB	MO 64440-9501	IND
KAMALI, ALI	1820 WEBSTER	TOPEKA	KS 66604	STU
KANAK, NANCY	442 SOUTH 5TH	PHILLIPSBURG	KS 67661	FAM
KANSAS STATE HISTORICAL SOC	120 WEST 10TH	TOPEKA	KS 66612	IST
KECK, DICK AND CYNTHIA	2709 W. 74TH STREET	PRAIRIE VILLAGE	KS 66208	FAM
KELLY, MARK W	8207 MELROSE DR	LENEXA	KS 66214	FAM
KEPLINGER, DOROTHY	RT.1 BOX 99	GRENOLA	KS 67346-9612	FAM
KILLBLANE, RICHARD	1003 NORTH 7TH	ARKANSAS CITY	KS 67001	STU
KIMBALL, HARRY & ISABELLE	P.O. BOX 707	TONGANOXIE	KS 66086	FAM
KING, MARSHA	120 WEST 10TH ST	TOPEKA	KS 66612	IND
KINSEY, KAROLYN	1430 LOUISIANA #12	LAWRENCE	KS 66044	IND
KIRKPATRICK, JON & A.J.	3070 RIVER PARK DR	WICHITA	KS 67203	FAM
KLAUS, JOHN	FORT HAYS UNIVERSITY			STU
KOLLER, DONALD G. and RITA L.	1513 N. BUCKNER	DERBY	KS 67039-2948	FAM
KORALEK, LILLIAN	R 1 BOX 199	ELLSWORTH	KS 67439	FAM
KREISSLER, ALICE	6709 O'NEIL	WICHITA	KS 67212-6332	IND
KREUTZER, DEBRA	1040 LAWRENCE CT	WICHITA	KS 67206	IND
KUHN, DONALD	2509 PINE ST.	HAYS	KS 67601-0898	IND
LAMBERT-TUCKER, JAYLENE	12308 NEMAN	OVERLAND PARK	KS 66213	FAM
LAMPE, LINDA	10470 DEERFIELD LANE	OLATHE	KS 66061-2776	CON
LAWSON, CONNIE	RR2 BOX 97C	WINFIELD	KS 67156	FAM
LEES, BILL AND VERONE	419 NW 20TH ST	OKLAHOMA CITY	OK 73103	FAM
LEES, CHARITY KIMERY	1332 W. BOYD ST	NORMAN	OK 73069-4804	IND
LEUTZINGER, REBECCA	504 MARINER	SILVER LAKE	KS 66539	IND
LIGHTY, BOW AND DONNA	604 SOUTH 4TH	MULVANE	KS 67110	FAM
LIPPINCOTT, KERRY	441 KIRK AVENUE	CASPER	WY 82601	IND
LOHRMEYER, LIN	796 PROSPECT	PHILLIPSBURG	KS 67661	IND
LOMSHEK, JERRY	304 S CHICOPEE RD	PITTSBURG	KS 66762	CON

LUCAS, DEBRA AND PETER	1043 STATE	AUGUSTA	KS 67010	FAM
LUECKE, EDWIN AND ALICE	410 WEST 9TH	CONCORDIA	KS 66901	FAM
LUHMAN, HOPE	1480 PLEASANT VALLEY WAY	WEST ORANGE	NJ 07052-2427	IND
MANDEL, ROLFE	1730 SW HIGH ST	TOPEKA	KS 66604-3121	IND
MARSHALL, JOHN AND BERNADINE	5149 LOCUST	KANSAS CITY	KS 66106	FAM
MATTHEWS, MILTON	10215 BINTNER LN	WICHITA	KS 67212	IND
MATZEN, TED & MARY KAY	808 FITZ	GARDEN CITY	KS 67846	FAM
MAUCK, JOANN	RT. 1 BOX 71	HOXIE	KS 67740-9801	IND
MAYBEE, RONALD & CAROL	600 RED BARN LANE	WICHITA	KS 67212-3541	FAM
MCBETH, CORAL	ROUTE 5, BOX 79	WINFIELD	KS 67156	IND
MCCHESNEY, KAROL	P.O.BOX 62	MUNDEN	KS 66959-0062	IND
MCCOLLOM, MARK, KAY, & RACHELLE	R 2 BOX 220-M	AUGUSTA	KS 67010	FAM
MEFFORD, CHRISTOPHER RAY	1427 SOUTH CENTRAL	CHANUTE	KS 66720	STU
MEHL, JANE	ROUTE 3, BOX 77	BELOIT	KS 67420	IND
MELTON, BETTY AND DON	ROUTE 2, BOX 104	BELOIT	KS 67420	FAM
MIDWEST ARCHEOLOGICAL CTR	100 CENTENNIAL MALL NORTH	LINCOLN	NE 68508-3803	IST
MILLER, CINDY AND ROBERT	1305 HIGHLAND	EMPORIA	KS 66801-5014	FAM
MILLER, WAYNE F.	ROUTE 1, BOX 25	DEERFIELD	KS 67838-9501	IND
MILLER, WILLIAM	49 SUNSET DRIVE	PHILLIPSBURG	KS 67661	IND
MILLHOLLEN, ANNE	1303 STEVEN DR	HAYS	KS 67601-2629	FAM
MILLICK, GLORIA J.	125 SW TERRA DR	TOPEKA	KS 66609	IND
MILLIKEN, PATRICIA	3005 SADDLEWOOD DRIVE	BONITA	CA 91902-2001	IND
MONSON, GINGER G	2523 COLORADO	TOPEKA	KS 66605-1666	IND
MOONEY, MIKE	BOX 93	AGRA	KS 67621	IND
MOORE, JIM AND MARGARET	221 NORTH CAMPBELL	BELOIT	KS 67420	FAM
MOORE, MEGAN L	1214 TENNESSEE #4	LAWRENCE	KS 66044-3237	STU
MORIARTY, JUDITH K	STATE OF MISSOURI	JEFFERSON CITY	MO 65102	INS
MORRIS JR, CONRAD L	806 LAKE OF THE FOREST	BONNER SPRINGS	KS 66012	IND
MORRIS, SARAH A	2045 SW MACVICAR #6	TOPEKA	KS 66604	IND
MOSES, ROGER	FORT HAYS STATE UNIVERSITY			STU
MULDER, CLEVE AND CLETA	721 UNIVERSITY PLACE	SALINA	KS 67401	FAM
MULDER, JENNIFER	321 E PRESCOTT	SALINA	KS 67401	IND
MURPHY, HELEN	35 EAST 53RD ST.	LONG BEACH	CA 90805-5829	IND
MURRAY, KEITH AND GAIL	20836 W 45TH TERR	SHAWNEE	KS 66218	IND
MURRAY, KENT C AND GLENNA J	409 SOUTH WALNUT	PAOLA	KS 66071-1974	FAM
MURRAY, LINDA AND WENDI	ROUTE 2, BOX 92	OSKALOOSA	KS 66066-9045	FAM
MYERS, CARL	1011 N WASHINGTON	WELLINGTON	KS 67152-0322	IND
NEUHAUSER, KENNETH	600 PARK STREET	HAYS	KS 67601-4099	IND
NIELSEN, CHERYL	RR1 BOX 34	ISABEL	KS 67065	IND
NORRIS, FLOYD	PO BOX 415	KENSINGTON	KS 66951	FAM
NORTH, EMLIN	5033 W. 26TH STREET	TOPEKA	KS 66614	IND
NUDSON, GERALD AND JUDY	1908 NW WILCOX CT	TOPEKA	KS 66608-1870	FAM
O'BRIEN, DR PATRICIA J.	DEPT. OF SOCIAL ANTHROPOLOGY, KSU	MANHATTAN	KS 66506	LIF
ODELL, GEORGE H	524 S ALLEGHENY	TULSA	OK 74112	LIF
OLIVA, BONITA AND LEO	ROUTE 1, BOX 31	WOODSTON	KS 67675-9710	CON
OPAT, MICHAEL JASON	8405 W CENTRAL AVE #1716	WICHITA	KS 67212-3665	IND
OSBORNE, JENNIFER & DAVID	914 DRURY LANE	WICHITA	KS 67207	FAM
PALMER, LON R.	358 WEST 8TH	HOISINGTON	KS 67544-1924	IND
PANKRATZ, DICK	120 W 10TH ST	TOPEKA	KS 66612-1291	INS
PAQUETTE, ANGIE	3215 DRIFTWOOD DR	MANHATTAN	KS 66502	FAM
PARISH, ARLYN	PO BOX 206	HIGHLAND	KS 66035-0206	IND

PARK, DALE AND LOUISE	BOX 66 521 N. CENTER	MANKATO	KS 66956 FAM
PARKER, ROB	710 S CENTRAL	MULVANE	KS 67110-1809 STU
PARMENTER, CHARLES JOHN	2723 S TOPEKA #302	WICHITA	KS 67216-1082 IND
PEARMAN, DOROTHY	2931 CENTRAL PARK D21	TOPEKA	KS 66611 LIF
PEARSON, GAIL AND ROBIN	501 N WESTERN AVE	BELOIT	KS 67420-1849 FAM
PEARSON, GENEVA AND DELMAR	ROUTE 3 BOX 71	BELOIT	KS 67420 FAM
PERTTULA, TIM	10101 WOODHAVEN DR	AUSTIN	TX 78753 IND
PETERSON, JOHN AND FRAN	2756 CHIPPERFIELD RD	LAWRENCE	KS 66047 FAM
PETERSON, MARLIN V.	SOUTH A STREET RR1	CLAY CENTER	KS 67432 IND
PHIPPS, LINDA L AND TIM	RT 2, BOX 262	GALENA	KS 66739 FAM
PIONEER-KRIER MUSEUM	430 WEST 4TH	ASHLAND	KS 67831-0862 IST
PORTER, BARBARA	BOX 75	HANOVER	KS 66945-0075 FAM
PORTER, MAX	490 FISHER	PHILLIPSBURG	KS 67661 IND
PRIVAT, GARRY AND MARILYNN	623 ELLINWOOD	OSAGE CITY	KS 66523-1225 FAM
PUBLIC LIBRARY	625 MINNESOTA AVE	KANSAS CITY	KS 66101-2805 IST
RADER, LARRY	PO BOX 45036	PHOENIX	AZ 85080-2036 IND
REED, EVELYN	P.O. BOX 141	COLDWATER	KS 67029-0141 IND
REED, HAROLD AND MARGIE	3825 EAST STIMMEL ROAD	SALINA	KS 67401 FAM
REED, WENDELL	RT 4	PRATT	KS 67124 IND
REICHART, MILTON	605 LINN STREET	VALLEY FALLS	KS 66088 LIF
RENEBERG, GORDON	RR1 BOX 121	KENSINGTON	KS 66951 FAM
REUST, HEATHER AND THOMAS	718 S 5TH ST	LARAMIE	WY 82070-3722 FAM
REXROAD, VIRGINIA	300 CRESCENT BLVD	HUTCHINSON	KS 675021-551 CON
REYNOLDS, JOHN D	120 WEST 10TH	TOPEKA	KS 66612 HLF
REYNOLDS, LOGAN	6613 BRIARCLIFF RD	TOPEKA	KS 66619 STU
RICHTARIK, ANNE	227 N MINNESOTA	LAWRENCE	KS 66044 IND
RISSMAN, LINDA	942 AVALON	LAWRENCE	KS 66044 FAM
RITTERBUSH, LAUREN AND BRAD LOGAN	UNIVERSITY OF KANSAS	LAWRENCE	KS 66045 FAM
ROBB, JIM AND TRISH	PO BOX 66	DANVILLE	KS 67036-0066 FAM
ROBB, NOEL N AND PAULINE	824 E 35TH AVENUE	SPOKANE	WA 99203-3162 FAM
ROBERTS, JAMES E.AND KAREN M.	11007 CAMBRIDGE	KANSAS CITY	MO 64134-2714 FAM
ROBERTS, STEVEN AND DAMIAN	PO BOX 771025	WICHITA	KS 67277-1025 FAM
ROBINSON, MARIE	726 E 2ND	BELOIT	KS 67420 IND
ROBSON, BARBARA O	1912 GEBHART ST	SALINA	KS 67401 IND
ROECKERS, HENRY J.	R.R.1 BOX 2A 120 N WALNUT	GARNETT	KS 66032 IND
ROGERS, HARVEY	CHISHOLM TRAIL APT #4	ELLSWORTH	KS 67439 IND
ROMINE, JOHN AND PHYLLIS	37180 WEST 303RD STREET	PAOLA	KS 66071 FAM
ROPER, DONNA	1924 BLUEHILLS RD	MANHATTAN	KS 66502-4503 CON
ROTH, DWIGHT	HESSTON COLLEGE BOX 3000	HESSTON	KS 67062 IND
ROWLISON, DON	ROUTE 1 BOX 57M, COTTONWOOD RANCH	STUDLEY	KS 67759 LIF
ROYCE, CLARE H.	RURAL ROUTE BOX 93	LANGDON	KS 67549 LIF
RUNBERG, JAMES E.	316 N MCKINLEY	LINDSBORG	KS 67456 IND
RUTTER, ELEANOR	3314 MASSACHUSETTS	TOPEKA	KS 66605 IND
SAGE, SHARON	9130 SW 97TH	AUBURN	KS 66402-9610 IND
SALLEE, KENT	BOX 490 109 E GORDON	INMAN	KS 67546-0490 FAM
SAMSON, CAROL	915 SW HIGH AVE	TOPEKA	KS 66606 IND
SCHILD, DARCY	1633 ILLINOIS ST	LAWRENCE	KS 66044 IND
SCHILLING, VICKI	2357A BELLVIEW	TOPEKA	KS 66605-3215 IND
SCHOEN, CHRISTOPHER AND ROXANNE	177 NW THE DRIVE	TOPEKA	KS 66606 FAM
SCHOOL, KATHLYN J	2021 RAYMOND	SALINA	KS 67401 IND
SCHRATER, JUDY	8102 SUMMERS ROAD	HUTCHINSON	KS 67502 IND

SCHULTE, REBECCA	801 MISSOURI	LAWRENCE	KS 66044 IND
SCOTT, FRED	PO BOX 442256	LAWRENCE	KS 66044 IND
SCRIMSHER, FRANCES Z. AND BOB	5441 SW 19TH ST	TOPEKA	KS 66604-3623 FAM
SEARCH, JAMES J.	321 COMMERCIAL	ATCHISON	KS 66002 LIF
SELLEY, LINDA	12120 CHERRY LN	OLATHE	KS 66061 IND
SHAW, JUNE	1407 WILTON LN	ST. LOUIS	MO 63122-6942 FAM
SHELTON, AARON	FORT HAYS STATE UNIVERSITY		STU
SHERRADEN, KEN	760 SOUTH BROADWAY	SALINA	KS 67401 LIF
SHERRADEN, SHAWN	P O BOX 302	CHAPMAN	KS 67431 STU
SHIVELY, BARON	823 NORTH ELM	MCPHERSON	KS 67460-2813 IND
SHRINER, BERYL	2011 28TH ST	GREAT BEND	KS 67530-7329 IND
SHRYOCK, ELISE	331 CLARK	AUGUSTA	KS 67010 IND
SINES, LORI	12530 166TH ST	LINWOOD	KS 66052 IND
SKIDMORE, FORREST AND NINA	630 NW WALNUT LANE	TOPEKA	KS 66617 FAM
SLEAD, DAVID AND LINDA	246 OLD HWY 50 NW	LEBO	KS 66856-9223 FAM
SLOCUM, DUSTI	2000 PENNSYLVANIA	TOPEKA	KS 66607-1233 STU
SMITH, KENNETH AND CLORENE	PO BOX 774, 313 W. GARFIELD	GREENSBURG	KS 67054 FAM
SMITH,III, WALTER J.	ROUTE 1	SCRANTON	KS 66537 IND
SNIDER, CAROLYN	324 BUSSWOOD	HAYSVILLE	KS 67060 IND
SNYDER, KELLY	1022 W 5TH	BELOIT	KS 67420 IND
SOLOMON, TERRY	2552 170TH AVE	ELLIS	KS 67637-9291 IND
SPERRY, C E AND IRENE	737 PRESCOTT CT.	LAWRENCE	KS 66049 FAM
SPERRY, O.D. & CAROL	1700 MORGAN	PARSONS	KS 67357-4344 FAM
ST CLAIR, CHRIS	9500 W 88TH PL #201	OVERLAND PARK	KS 66212 IND
STAAB, RODNEY	1420 SOUTH 78TH ST	KANSAS CITY	KS 66111-3208 IND
STANLEY, ELLEN MAY	BOX 1057	BIGHTON	KS 67839-1057 IND
STATE ARCH. RESEARCH CENTER	BOX 1257, 2425 E. ST CHARLES ST	RAPID CITY	SD 57709-1257 IST
STATE UNIVERSITY OF NEW YORK	LOCKWOOD LIBRARY BLDG	BUFFALO	NY 14260 IST
STAUFFER, JIM F	521 N MAPLE	MCPHERSON	KS 67460 IND
STECHER, DAVID J	1605 COMMERCIAL	ATCHISON	KS 66002 IND
STEFFEY, JANELL	1809 1/2 MASSACHUSETTS	LAWRENCE	KS 66044 STU
STEIN, MARTIN	120 WEST 10TH	TOPEKA	KS 66612 LIF
STEIN, PAT AND KELSEY	4931 SW 53RD	TOPEKA	KS 66616 FAM
STEVENSON, MARGARET L.	2453 ALABAMA	LAWRENCE	KS 66046 IND
STIGGINS, LYNN & NOAMI	10611 S PARTRIDGE RD	PARTRIDGE	KS 67566-9441 FAM
STITES, DEAN	405 W. BUFFALO	GIRARD	KS 66743 FAM
STOCKEBRAND, WALT & ESTHER	2716 UNIVERSITY DR	LAWRENCE	KS 66049 FAM
STOLL, JUDITH A.	911 NEOSHO #2	EMPORIA	KS 66801 IND
STRICKLER, BRENDA	STONEBRIDGE RD, ROUTE 2 BOX 274	ARGYLE	TX 76226 LIF
STRICKLIN, HENRY	BOX 294 208 E ASH	WEIR	KS 66781-0294 IND
STRICKLIN, WILLIS	RR 1 BOX 301	GALENA	KS 66739-9525 IND
STUBBS, MICHAEL	RR 1 BOX 173	ESKRIDGE	KS 66423 IND
SUDBURY, BRYON	PO BOX 2282	PONCA CITY	OK 74601 LIF
TAYLOR, A.J.	WTAMU BOX 967	CANYON	TX 79016 IND
TAYLOR, DOUGLAS	1022 S MAIN	MCPHERSON	KS 67460 IND
TAYLOR, JEAN	BOX 204	IUKA	KS 67066 IND
TEMPLETON, MARTHA I	2717 8TH ROAD	BLUE RAPIDS	KS 66411-9750 IND
TERRILL, CHUCK & BEN	1117 OSAGE	AUGUSTA	KS 67010-1556 FAM
TERRY, KENNETH AND INA	518 E. 25TH	HUTCHINSON	KS 67502 FAM
TEVIS, KAREN AND DAN	416 S TERRACE	WICHITA	KS 67218 FAM
THIES, RANDALL M.	120 WEST 10TH STREET	TOPEKA	KS 66612 LIF

THOMPSON, CHARLES	1720 CHRISTMAS TREE LANE	PONCA CITY	OK 74604 IND
THOMPSON, ROBERT & FREDA	817 COLLEGE	ATCHISON	KS 66002-3057 FAM
THURMOND, J PETER	RT 1 BOX 62B	CHEYENNE	OK 73628 LIF
TODD, ARTHUR AND HELEN	ROUTE 1 BOX 112C	GREENSBURG	KS 67054 FAM
TODD, CLARENCE	PO BOX 82	EFFINGHAM	KS 66023-0082 IND
TUCKER, VITA J AND KEITH	RR 2 BOX 213	BURLINGAME	KS 66413-9583 FAM
ULLRICH, EILEEN	PO BOX 2169	LAWRENCE	KS 66044 IND
UNIVERSITY OF OKLAHOMA LIBRARY	401 W. BROOKS STREET	NORMAN	OK 73019 IST
UPHAM, WAYNE A	400 CONTINENTAL	JUNCTION CITY	KS 66441-4335 IND
VEHIK, DR. SUSAN	455 W LINDSAY, ROOM 521	NORMAN	OK 73019 IND
VOGT, DEBRA	RT 3 BOX 15	NORTON	KS 67654 FAM
VRBAS, JEANETTE	RR 2 BOX 26A	ATWOOD	KS 67730-9607 IND
WALKER, DANNY	1520 MITCHELL	LARAMIE	WY 82070-2329 IND
WALLEN, ROSE MARIE AND MIKE	116 MILL ST.	LINDSBORG	KS 67456 FAM
WALTERS, CLEAT AND VIRGINIA	2409 24TH STREET	GREAT BEND	KS 67530-4448 FAM
WALTERS, DARYL AND SHIRLEY	1817 SW 34TH ST	TOPEKA	KS 66611-2579 FAM
WARD, ROGER	1962 COUNTRY CLUB RD	ELDORADO	KS 67042-4114 IND
WATKINS, KENNETH	327 WEST BURBANK	FREDERICKSBURG	TX 78624 LIF
WATKINS, MONICA	327 WEST BURBANK	FREDERICKSBURG	TX 78624-3356 IND
WEDEL, DR WALDO R	350 PONCA PLACE #431	BOULDER	CO 80303 HLF
WEDEL, VERNON	823 SPRUCE	HALSTEAD	KS 67056 LIF
WEEMS, JOELI	PO BOX 445	ARKANSAS CITY	KS 67005 IND
WEHNER, TREASURE & BROOKE	302 E 10TH QVE	WINFIELD	KS 67156 IND
WEIDHAAS, PAUL	7705 LAKESIDE AVE.	MANHATTAN	KS 66502-8477 IND
WEIS, BART	2821 S LANSING WAY	AURORA	CO 80014 IND
WERTS, KATHERINE	311 NORTH BELL	BELOIT	KS 67420 IND
WESSLING, JOANIE AND RUTH	ROUTE 1	BELOIT	KS 67420 FAM
WESTON, TIM	120 WEST 10TH, HISTORIC RESEARCH	TOPEKA	KS 66612-1291 IND
WETHERILL, BERT	12304 WALMER	OVERLAND PARK	KS 66209 IND
WETZEL, THERESA	7521 NW HODGES	SILVER LAKE	KS 66539 FAM
WHELAN, ROXIE	302 WEST # 18	PHILLIPSBURG	KS 67661 IND
WHITE, JOHN AND REBECCA	1702 COUNTRYSIDE DR	PITTSBURG	KS 66762 FAM
WILDGEN, MIKE	801 LOUISIANA ST	LAWRENCE	KS 66044-0708 CON
WILLIAMS, CECIL	P.O. BOX 141	BARTLEY	NE 69020-0141 IND
WILLITS, RAMONA J	923 NORTH 2000TH RD	LAWRENCE	KS 66049-9043 IND
WILSON, IDA & DANIEL & CELINA	P O BOX 478	LEBO	KS 66856-0004 FAM
WILSON, JOHN	FORT HAYS STATE UNIVERSITY		STU
WITTY, THOMAS	3419 ARROWHEAD ROAD	TOPEKA	KS 66614 HLF
WULFKUHLE, VIRGINIA A.	333 QUINTON AVE	TOPEKA	KS 66606-1179 IND
WYSS, MARILYN	40425 WHITTIER	HEMET	CA 92544 IND
YARMER, ROBERT E.	P.O.BOX 158	ELLINWOOD	KS 67526 IND
YOUNG, A.L.	214 S. INDEPENDENCE	BELOIT	KS 67420 LIF
YOUNG, CATHERINE L	3530 WEST 83RD ST APT 210	PRAIRIE VILLAGE	KS 66208 IND
YOUNG, DORTHY	214 S. INDEPENDENCE	BELOIT	KS 67420 IND
ZIEGLER, ROBERT	2700 WEST 51ST ST.	WESTWOOD	KS 66205 IND
ZIESEMER, ALLAN	9368 OHIO	OMAHA	NE 68134 IND
ZIMMERMAN, BRUCE	2521 SE PECK RD	TOPEKA	KS 66605 IND
ZUBER-CHALL, SUSAN	2004 SW LINCOLN	TOPEKA	KS 66604 STU

INFORMATION FOR AUTHORS

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