

ANCIENT WATERMAN CREEK

by Michael J. Perry

nique among the historical county atlases of Iowa is the 1911 plat of Waterman Township, which lies in the rugged, timbered hills of southeastern O'Brien County, and through which meanders Waterman Creek, named after the area's first white settler. Here, scattered among the small squares marking farmsteads, the icons denoting schoolhouses, and the hand-written names of property owners, Chicago mapmaker George A. Ogle had lettered the word "FORT" and labeled tiny circles "INDIANS MOUNDS." For ancient mounds and fortifications to appear on a map intended for farmers, mail carriers, and salesmen is perhaps a testament to the northwestern Iowa citizenry who first saw these curious yet somehow important earthworks. Given prevailing early 20th-century attitudes about Native Americans as poor and uneducated, or sly, warlike savages, the ancient earthworks amid Iowa farms must have stirred the imaginations of many to thoughts of the civilization that preceded.

The green ovals highlight the Indian mounds and fortifications that appeared on the original 1911 map of Waterman Township, O'Brien County. Note how they appear along waterways—Waterman Creek and at its confluence with the Little Sioux River. The heavy dashes mark the route traveled by archaeologist Charles Keyes through the valley and hills in 1921. By the time of later investigations, some of the farms had new owners. (For the ease of the reader, the author added the green ovals and heavy dashes and darkened the waterways.)

The Waterman Creek earthworks were also reported in rare detail in the 1914 O'Brien County history, whose authors noted that "it may not be generally known that there are definite evidences of prehistoric burial mounds and fortifications in O'Brien county.... [The] most important of the fortifications . . . is to be found on the farm of Jacob [Waggoner], covering about an acre . . . with an open entrance way on each of the four sides, the earthworks forming a very plain and distinct square. [Another fortification lies] not far from the Waterman Siding, on the farm of Henry Braunschweig. The last . . . of the forts is found about a stone's throw east of the iron bridge on Mr. Innes' farm." Groups of mounds near the junction of Waterman Creek with the Little Sioux River were also described. Relic hunters were attracted to these features early in the history of the township and soon began digging up bits and pieces of the past. There was enough local interest that a sizable collection of "pottery, specimens of stone implements, and other articles on which the handiwork of man had left its impress [was placed on] exhibition in the Quaker school" a few miles south of Primghar.

While the nature of Waterman Township's mounds

(in which some 19th-century excavations yielded human remains) may have been understood by turn-of-the century relic seekers, the county historians promoted an air of mystique about the fortifications. "We see that the authorities in other states and counties differ as to the dates of origin of these earthworks, and

even as to their purpose. Some authorities limit them to the Indian, other authorities date them back into the thousands of years and even into the stone age. Also some good authorities conclude that these earthwork squares were but places of worship for ceremonies of a religious nature and not as a means of defense. We will leave that question for the archaelogist [sic] to settle."

Despite the interest in their ancient earthworks, most Waterman Township farmers would not spare them the plow or halt the relic hunter's shovel. Today the mounds are no longer to be seen. The outlines of all but one of the old fortifications have disappeared under the weight of heavy machinery, and only the well-practiced eye might still spot the occasional artifact. Who were those ancient builders? How long ago did they walk the paths between their lodges? What new homeland destination would cause them to forsake the

scenic Waterman hills? In the years since Waterman Township farmers first discovered their ancient earthworks, many have sought answers to such questions. The story of the first to document the search for ancient Waterman Creek follows.

Township archaeology was answered seven years after the 1914 county history book had first suggested the extent and complexity of prehistoric use of the region. In July and August of 1921, Charles R. Keyes, 50 years of age and about to become director of the State Historical Society's Iowa Archaeological Survey, was a faculty member at Iowa Lakeside Laboratory's three-week summer session in natural history. During that session, the rustic cabins near Miller's Bay at West Okoboji housed university students and Iowa's most distinguished naturalists of the day, including State Geologist George Kay and botanists Bohumil Shimek and Louis Pammel.

Over the preceding three decades, Keyes had developed his largely self-taught expertise in Iowa ar-

chaeology by building his own artifact collection, examining other eastern Iowa collections, developing his own detailed artifact classification scheme, and compiling a bibliography of published references, which included an entry about the description of the Waterman Township earthworks in the O'Brien

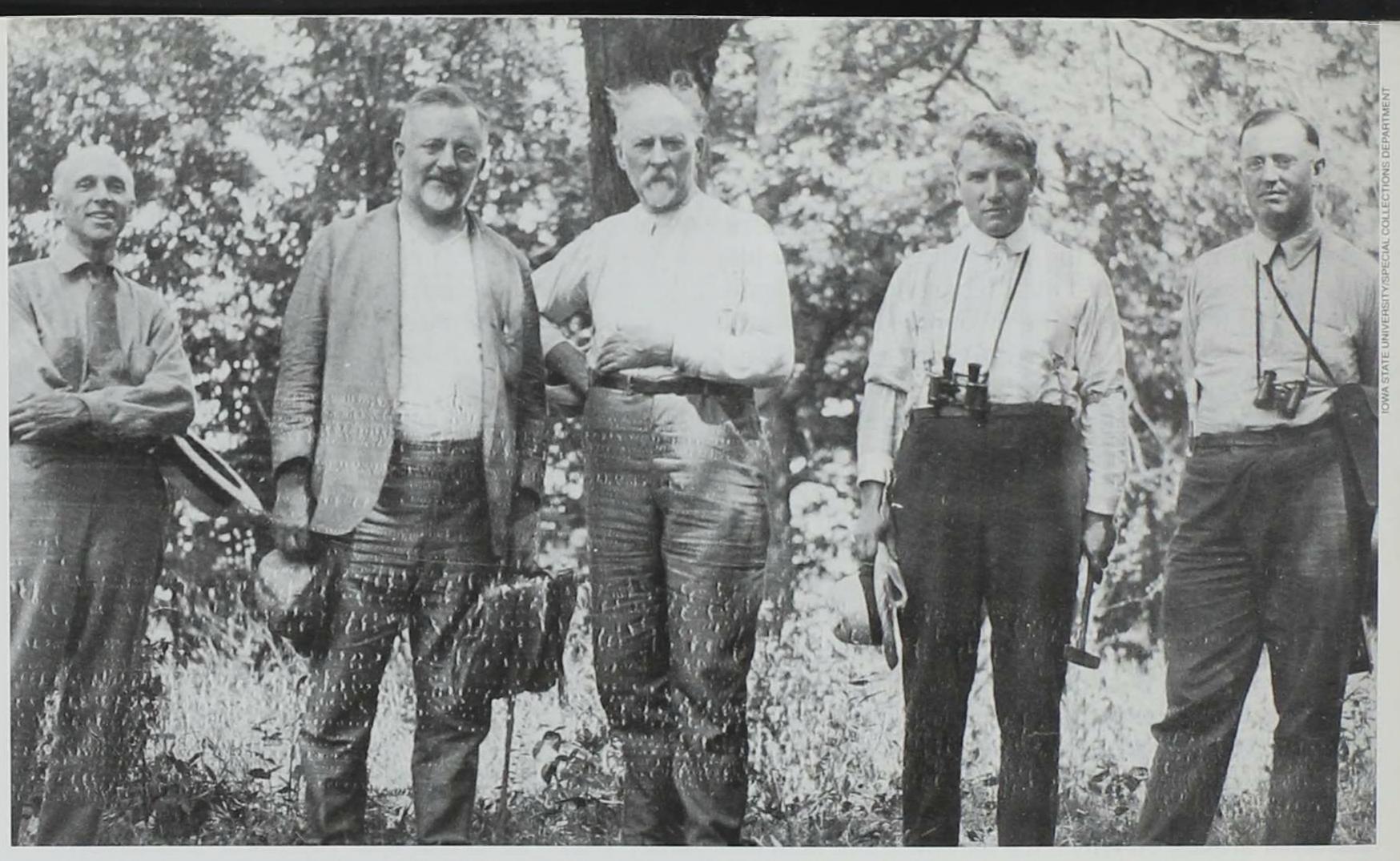
"Every civilized people desires to know in human terms the story of the land it occupies."

— Charles R. Keyes, March 1935

County history.

For Keyes, the 1921 trip to the Lake Okoboji area was a pilot project, an opportunity to inspect and document archaeological sites in the region as an example of how a statewide survey might operate. On a working vacation from his duties as a Cornell College professor of German language and literature, Keyes used the time to instruct students in archaeological survey methods, identify local informants who were familiar with sites, and make field trips. With such students as he was able to enlist, Keyes hiked along the West Okoboji lakeshore, rode across the lake on *The Queen* or in a "kicker" to Arnolds Park, and traveled to Spirit Lake, Milford, Spencer, and Waterman Creek.

Early in the Lakeside Lab session, Keyes learned of Jens Thompson, a Spencer lumberyard manager and collector of Indian relics who was familiar with some



Five giants of Iowa's natural history: (from left) archaeologist Charles R. Keyes, botanists Bohumil Shimek and Louis Pammel, geologist George Kay, and ornithologist T. C. Stephens. Photo taken at Iowa Lakeside Laboratory, West Okoboji, 1921.

of the Waterman Creek sites. Keyes arranged a field trip with Thompson, and on July 24, the two went on "a long trip by automobile to southern Clay and southeastern O'Brien counties," according to Keyes's notes. In those days when motor cars were just beginning to replace horses and carriages for personal transportation, the trip followed roads that had no elevated grade or finished surface, and travel must have been slow by modern standards.

Keyes and Thompson spent a good share of the day along the lower reach of Waterman Creek, following a dirt road up the valley and taking nearly as many turns as the meandering creek itself. Heading in southern Osceola County and winding its way through eastern O'Brien, Waterman Creek joins the southwesterly course of the Little Sioux River. The day's first stop was near the confluence of the two streams. On the level bottomland west of the creek and surrounded by high hills lay the vestiges of an ancient village area. Keyes called it Waterman's Siding, after a former railroad siding of the old Chicago and North Western line that ran just north of the site. The freshly graded road cut through the old village area. The two men climbed out of the car and walked along the road, where potsherds, clam shells, bone fragments, and chips of flint and quartzite lay exposed. The variety of colors of the flint implements Keyes picked up—pink, gray, brown, white—was remarkable.

Continuing on, Thompson's car chugged up a high

hill to a view that spanned miles in all directions. From the hilltop farms of Myron Hill and H. J. Robinson they could see several mound groups, the resting places of ancient deceased and what some experts also consider territorial markers. Despite years of cultivation, a row of five mounds was still visible on the Robinson farm. The mounds were circular, each about 2 feet high and some 20 to 30 feet in diameter. Their alignment corresponded well with how they were described in the county history and how they appeared on the 1911 plat (when Louis Hill owned the farm).

The circuitous route next brought Keyes and Thompson to the old Waggoner farm, now owned by Clyde Martin and a mile or two upstream from the mounds. Here they parked the car and met Martin and his father, and Keyes inquired about the Indian antiquities he'd heard and read about. The Martins not only confirmed the reports, but also agreed to a tour of their farm. Carrying a shovel, Clyde Martin led the way on foot through a fine field of tall corn toward Waterman Creek. Always watchful, Keyes spotted no artifacts along the way.

The men emerged from the cornfield and came upon an impressive earthwork. About an acre in size, it was overgrown with grass but clearly discernible. Keyes described this plot of land as a nearly square elevation on the bank of Waterman Creek. The elevation was about 4 feet high, and was surrounded on three sides by a waist-deep ditch, 10 to 12 feet wide.

Shallow depressions indicated the site of ancient lodge pits. Clyde Martin stomped on his shovel blade several times before he could loosen and turn over the relic-filled soil near one of the lodge pits. "This site has never been plowed, because, Mr. Martin says, it contains too many stones and bones," Keyes recorded. "The whole area appears full of animal bones (some very large), stones, pottery fragments quite similar to those of the Broken Kettle mound [near] Sioux City, flint chips, bone implements, clam shells, etc, etc. We excavated only a few spadefuls, but everywhere bones and potsherds came to light."

Once back at the Martin farmstead, Keyes and Thompson thought there was time for an easy jaunt through a nearby pasture, and they hiked up a low hill projecting out from the bluffs. At the top, Clyde Martin led the way to a small group of mounds which, despite affording yet another fine view of the valley, had escaped the attention of most local residents.

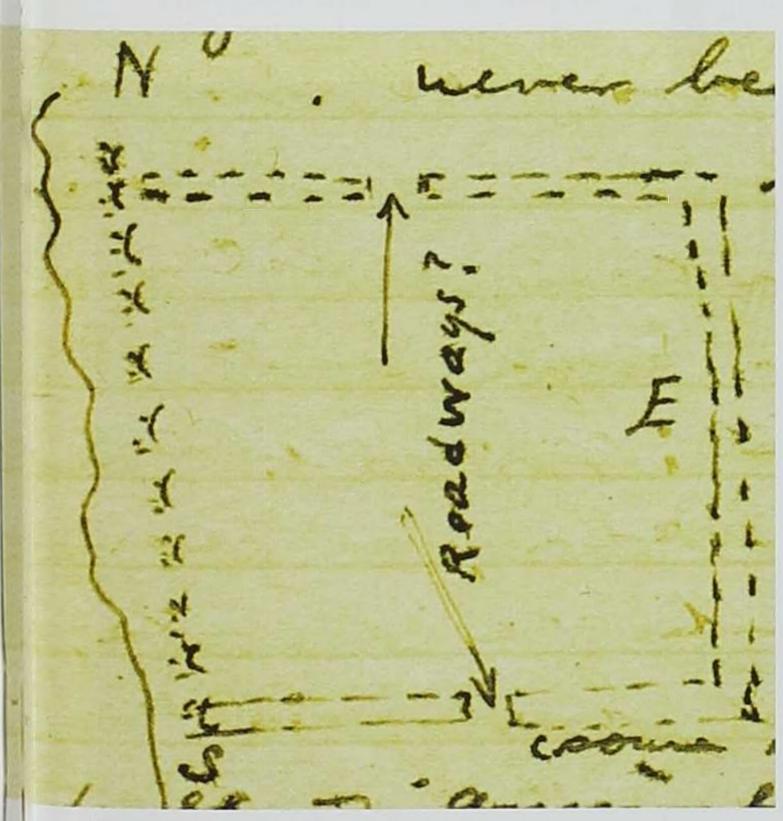
With daylight waning, Thompson and Keyes made the long trip back to Lakeside Lab. Keyes had easily recognized Clyde Martin's artifact-rich site on Waterman Creek as the remains of a village within an earthwork enclosure, and his description and thumbnail sketch compares favorably to what the county

history had labeled the "most important" of the ancient fortifications.

Keyes had no idea of the age of what he had witnessed that day, but he returned to Lakeside Lab with small collections of pottery, flint, and bone artifacts "for further examination." He clearly recognized the archaeological importance of the locality.

Survey was well established and Keyes was still spending his summers traveling the state in search of Indian sites. In the course of his surveys, the charismatic professor befriended many residents like Clay Jordan, who was willing to share his knowledge of local archaeological sites. Jordan accompanied Keyes on a return trip to the Waterman valley June 30, 1926. The two stopped along the road through the Waterman's Siding village site. A farmer had erected a new fence, and "in the fresh earth thrown from postholes . . . numerous potsherds could be picked up."

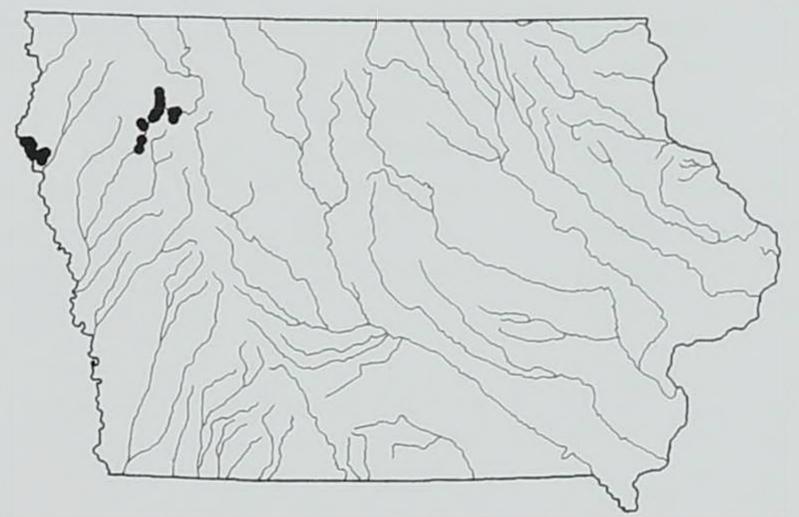
Then Jordan showed Keyes yet another village site, one of the fortifications that had appeared on the 1911 plat, near the old homestead of settler Hannibal H. Wa-



Keyes sketched the ancient village site on the Martin farm in July 1921. The dashed double line is the fortification ditch; the wavy line is Waterman Creek. The area was later known as the Wittrock site. Right: Aerial photo, circa 1972, oriented with the creek to the upper right. The three-sided fortification around the Wittrock site is still visible.



BOTH IMAGES: OFFICE OF THE STATE ARCHAEOLOGIST



Mill Creek sites have been recorded along Waterman Creek and the Little Sioux River, and (on far left) along the Big Sioux River in Plymouth County.

terman. The hike through a pasture took only a few minutes before chips of flint began to appear, and, a few steps later, a potsherd, dark gray against the dry soil. The find of the day, a small triangular arrow point, brought a smile to Keyes's face. Looking out toward the Little Sioux, with the hills in the distance, he made a few mental notes about the large village area, and the two walked back to the car. Calling it simply the Waterman site (not to be confused with Waterman's Siding), Keyes noted that it lay along the bank of the Little Sioux opposite the mouth of Waterman Creek. Although past cultivation had erased the depressions marking the location of lodges, the fortification ditch was still visible. "Many relics found here in past. . . . Flint chips, an arrowhead, and potsherds picked up."

As the 1926 field season came to a close and another school year began, Keyes felt he had made sufficient progress along the Little Sioux to summarize what he had found. In the neighboring counties of Cherokee and Buena Vista, he had seen fortification ditches and artifact styles similar to those in the Waterman Creek valley. Recognizing a pattern in the remains, Keyes named this culture Mill Creek, after the Cherokee County stream of the same name and along which many villages had once stood.

Keyes also found similarities in the distinctive grittempered and incised pottery of the Mill Creek culture with that of the Mandan villages (an Indian nation living in North Dakota when Lewis and Clark encountered them). The archaeological evidence of the Mill Creek earthwork enclosures and lodges also had similarities with those of the Mandan. Inside wood-post palisades set into ditches, the people of both cultures had built lodges of heavy, supporting timbers with walls of interwoven sticks, twigs, and grass, plastered with mud. The lodges housed extended families and protected stored food supplies.

The term Mill Creek continues to be used informally to identify the archaeological features recognized years earlier along Waterman Creek. Other sites in counties to the northeast and southwest (Clay, Osceola, and Woodbury) yielded shell-tempered pottery so unlike that of the neighboring Mill Creek culture that they would be distinguished as Oneota. Still other sites along the Little Sioux below Correctionville would later be linked to the widespread Woodland culture.

At this early stage of investigation, Keyes had no clue to the age of the Mill Creek villages, or of the other cultures he had found. Writing to the Sioux City Journal in November 1926, he described his findings, acknowledged the generous assistance of local informants, identified the limitations of his data, and called for more help filling the knowledge gaps. "Thus far several hundred persons have contributed information, ranging from the finding of a stone arrowhead to the discovery of a new mound group or an ancient village site. But Iowa is a big State and there remain thousands of square miles which are unknown territory as far as prehistoric man is concerned. Who in northwestern Iowa can help illuminate the dark spaces along the Little Sioux?"



This polished diorite discoidal was found at the Waterman's Siding village site. Width: 3³/₄ inches.

n his third visit to the Waterman valley, in July 1932, Keyes was accompanied by T. D. Kas of Sutherland, a physician with whom he had recently corresponded. Kas knew

well the congenial farmers, scenic views, and archaeological richness of the valley, and would serve not only as a field guide, but also as a strong advocate for preserving its antiquities. He introduced Keyes to Alfred Wittrock, the new owner of the Clyde Martin farm, where Keyes had been shown the elevated earthwork enclosed by the three-sided ditch. Wittrock produced arrowheads and potsherds he had found since acquiring the land. Among them was a specimen Keyes had never seen before, "a very fine quartz lens." A similar lens-shaped stone, this one made of polished diorite, had been found at the Waterman's Siding village by landowner Paul Braunschweig.

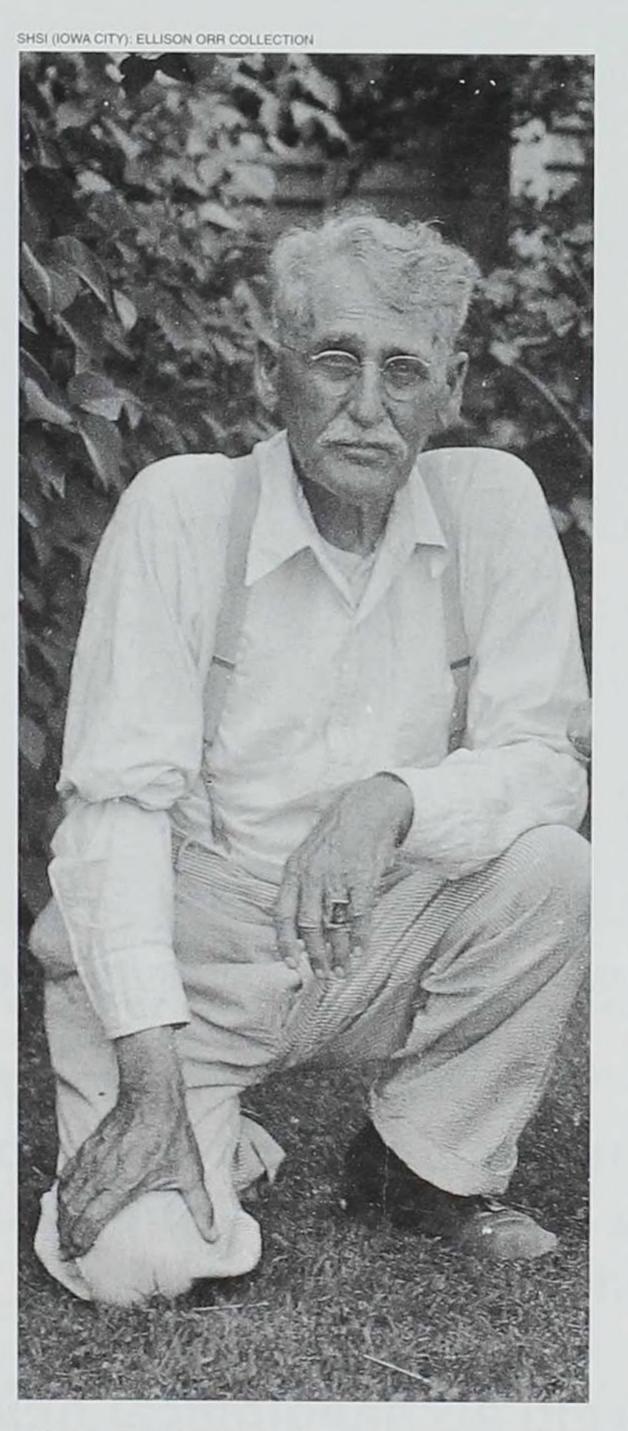
The curious lens-shaped stones that local collectors called "door knobs" because of their size and shape, would come to be called discoidals. Keyes could not suggest a function for these unusual ground stone discs, and their use remains a mystery. Some archaeologists, though not all, suggest that discoidals were used in a game by people of the widespread Mississippian culture to the south and east of Iowa. Summed up by one modern archaeologist, the Mississippian tradition was practiced by people whose "areal extent of influence, ceremonialism, public works, technology, population density,

and general richness is exceeded by no other aboriginal American culture north of Mexico." One of the major occupation sites of the Mississippian culture was at Cahokia (near present-day St. Louis). Could the influence of the builders of the gigantic Monks Mound and other flat-topped mounds at Cahokia have been felt as far away as northwestern Iowa, where the Mill Creek villages were then flourishing? Finds of distinctive

arrow points with multiple notches and finely made, shell-tempered, Mississippian pottery bowls among the Mill Creek villages suggest an affirmative answer.

The Waterman Creek villages were still producing

surprises and triggering questions that could only be answered by digging. Keyes would later justify the need for excavations by observing that prior to "June 11, 1934, no deep subsurface excavation on a modern scientific basis had been done anywhere within the state. Iowa is, in other words, a virgin archaeological field." In calling for test excavations, Keyes considered the nature of the Mill Creek villages "one of the unsolved problems of Upper Mississippi archaeology, confined wholly, so far as known, to the State of Iowa."



Ellison Orr, in 1937. Orr retired in 1930, at age 73, and began a second career as an archaeologist—a career that lasted two decades.

unrise of September 17, 1934, found three men from Waukon loading short shovels, garden trowels, a potato screen, camera, and surveying equipment into a car bound for northwestern Iowa. The men had spent the hottest summer on record excavating prehistoric remains close to home along the Upper Iowa River, where Allamakee County's eligibility for federal relief provided manpower for the excavations and much-needed income for those willing to brave the heat. Now embarking on a new adventure was Ellison Orr, retired telephone system worker, archaeologist, naturalist, trained surveyor, and 76 years

young. Orr, with his 51-year-old son, Fred, and Harrison Toney, left Waukon at 7 a.m. Their destination, the southeastern O'Brien County town of Sutherland, was the first of many stops that autumn in a great government-sponsored effort to map Iowa's most important mound groups and conduct the first professional excavations of Mill Creek villages.

Orr's mission, the rival of any modern archaeolog-

ical investigation, had been conceived by Keyes earlier that spring. Governor Clyde Herring had asked Keyes to serve on the Iowa Planning Board's Committee on Scenic and Historic Features. Projects would be funded through the New Deal's Federal Emergency Relief Administration and later by the Works Progress Administration. P. H. Elwood, professor of landscape architecture at Iowa State College, was the director of the Planning Board. In his words, projects would provide "needed employment for worthy citizens; basic facts and plans for future public works; and a long time program for the utilization of our land and other natural and social resources."

As a member of the Scenic and Historic Features committee, Keyes immediately began formulating a plan, which would be called Project 1047 and would directly involve Ellison Orr. In addition to mapping important mound groups and excavating village sites, Keyes foresaw an opportunity to make recommendations to the state for acquisition of well-preserved sites. Based on his suggestions, the committee determined that its goal would be to collect and assemble "all available information on the historic and scenic resources of the state with a view toward preservation and restoration and proper use by the people, [and] excavating ancient village sites and Indian mounds now threatened with destruction."

The itinerary for Project 1047 was set by Keyes, whose summertime travels for the State Historical So-

ciety of Iowa had taken him to many of the archaeologically significant sites Orr was to survey and excavate. One choice of where to excavate was easy: the Mill Creek villages of the Little Sioux River and Waterman Creek. Keyes described the proposed excavations not as full-scale, "but merely a test of their possibilities."

As field supervisor of Project 1047, Orr was obliged to correspond regularly with Keyes about the

progress of the statewide survey while keeping field notes and a diary of the crew's day-to-day activities. These would form the basis of a final report to Keyes containing maps, photographs, narrative descriptions of mound groups and excavations, and comments about the suitability of sites for acquisition by the State of Iowa.

Orr, his son, and Toney stopped briefly at Pilot Knob State Park. Here, young men in the Civilian Conservation Corps were at work constructing a round tower of local glacial boulders. Orr noted, "From the 'Knob' near the center of the area, a wonderful panorama is spread out in all directions, the horizon dimly seen through the haze." They drove on to Spencer, where they spent the night, and then met up with T. D. Kas in Sutherland. Kas would introduce them to local farmers, as he had done for Keyes two years earlier. The next morning, the light chill of early fall greeted the men, and they donned their jackets as they left their Sutherland hotel.

The most intensive study of Waterman Creek archaeology yet undertaken began in a pale yellow field of ripening corn. (Keyes had called this site the Waterman's Siding village; Orr would refer to it as the Braunschweig camp site, after the current owner, Paul Braunschweig.) Just west of the road the men started digging their first pit. They cleared away the uppermost, "plow" layer (the first foot of soil) but found very little. Then the "chink" of shovel against potsherd was heard, and the collection screen began to fill. Braunschweig was digging, too, and he handed what he had uncovered to the crew. By mid-morning Pit 1 was barely large enough for one worker to crouch inside, but it yielded "many pottery fragments of the Mill Creek culture and many bones of buffalo and elk,"

Orr recorded. "Those of dog or wolf and deer were less plentiful. . . . The pottery was characterized by the great variety of its shapes and decorative designs and by its firmness."

Back at the site the next morning, Fred Orr and Harrison Toney doubled the size of Pit 1. They stopped digging at 5½ feet; Orr could barely see the tops of their heads from the nearby road. They found bone awls, a pair of notched ar-

row points, a stone flake knife, and other stone tools. The artifacts revealed much about the daily lives of the ancient villagers. They had worked hides, fished in the river, produced weapons to bring down large game, ground corn into meal, and simmered their victuals in globular ceramic pots carefully decorated about the rim with incised lines and crosshatching. That same

"Until [now], no deep subsurface excavation on a modern scientific basis had been done....lowa is, in other words, a virgin archaeological field."

- Charles R. Keyes, March 1935



morning, the men opened Pit 2 a few paces beyond the first.

OTH IMAGES: OFFICE OF THE STATE ARCHAEOLOGIS

Before rain ended this second day in the field, the men headed to Charles J. Webb's blufftop cornfield east of Waterman Creek. There they surveyed a group of mounds that had first appeared on the 1911 township plat. They had already surveyed other mound groups on another hilltop the previous afternoon.

Over the next few days, work intensified. The men made a detailed topographic survey of the three-sided fortification on Alfred Wittrock's land. By this time Orr had inspected several private artifact collections that included impressive specimens from the Wittrock site. "Apparently some of the finest—the most elaborately decorated—specimens of pottery in the local collections have been dug up in this enclosure."

They also found more artifacts as they expanded and deepened Pit 2 at the Braunschweig site, and placed a third pit 20 paces away in line with the first

two. All three were about 6 feet by 6 feet, and nearly that deep. Pit 3 was begun and completed in one day, September 22, with the help of a group of Boy Scouts from Spencer. The work that day may represent Iowa's first public archaeology event. The importance of public interaction with the work of Orr's crew was not lost on Keyes, who expressed its significance to Planning Board Director Elwood: "Every piece of excavation has its frequent, and sometimes numerous, visitors. This means the answering of many questions, and the delivery of many an extemporaneous discourse on the methods and purposes of archaeological research. . . . The State of Iowa contains at least six hundred collectors of Indian relics. . . . The survey aims to keep more or less in touch with these, answer their inquiries personally as opportunity offers, and guide their activities into more nearly scientific and useful channels. In both cases, government appears to these people in a somewhat more human and kindly manner than usual. Is



Rims of pottery from the Mill Creek sites are distinguished by crosshatching, horizontal incising, pendant triangles, and filled triangular zone motifs. Far right: a fragment of a black ware vessel, inspired by the Mississippian culture.

there not a possibility that the future state will meet its people more frequently on this plane?"

Orr spent a rainy Sunday packing artifacts in two boxes for shipment to Iowa City and organizing his thoughts about the Braunschweig site by writing another progress letter to Keyes. Along with all the bones and stone tools, the shipping containers held a bewildering variety of pottery made by expert craftspeople. "There are 95 pieces of rims and with one exception I believe no two specimens alike as to decoration or shape. . . . The people who made them were past-masters of the art of decorating—and the shapes! There are two pieces of a heavy polished black ware without decoration—part of a jug or jug like vase that must have been a beauty."

The fieldwork for Project 1047, this great survey of the state's archaeological treasures, lasted throughout the fall of 1934 and was completed in the late winter of 1935. Orr's 124-page report devoted a few pages to each of the many sites visited across the state, so only the highlights of the Waterman valley survey were presented. Now Keyes had to summarize the results for Elwood and the Planning Board, focusing on the

broader significance of the work: "Every civilized people desires to know in human terms the story of the land it occupies. Appreciation of our Indian predecessors in America, both as individuals and as a race, is increasing rapidly in our day."

Orr's test pit recovery at the Waterman's Siding site would not be summed until 1980, when the State Historical Society sponsored a major upgrade of Keyes's entire collection. The 640 specimens represent a cross section of Mill Creek material culture. Some noteworthy additions to Orr's abbreviated field inventory are six drilled pottery disks (possibly used as spindle whorls), a bone tinkler (or bell), two bone matting needles, one basalt or gabbro discoidal, and a ground stone thunderbird effigy—all artifacts that functioned in domestic and ritual/ideological aspects of culture.

The many rim and body sherds of clay vessels encountered in the first three test pits only hinted at the meaning or significance of Mill Creek ceramic designs.

Most have yet to be deciphered, although large, modern excavations have shown that certain sets of styles tend to be associated with individual households. Rims with horizontal incising, incised pendant triangles, triangular zones filled with incising, crosshatching, and fingertip impressions were common in Orr's collection. A few have incised diagonal lines and a series of short incised gashes or fingernail impressions that form an abstract running-deer motif. The polished black ware sherds are an example of a relationship between Mill Creek and Mississippian people living

well beyond northwestern Iowa. Together, the variety of artifact types found at Mill Creek villages paints a picture of a complex society whose settlement, subsistence, and ceremonial or religious practices were among prehistoric Iowa's most elaborate.

From the three test pits at the Braunschweig camp

site, Orr and his crew had moved nearly 600 cubic feet of soil—the equivalent of about 30 tons, enough to fill a large dump truck. They accomplished this in a very short time by skipping tasks that modern archaeologists consider essential. Orr used his potato screen simply to hold the artifacts found, rather than sifting the soil through the screen to catch small items. The excavations appear to have proceeded without recording the depth of specific artifacts as they were struck by the shovel or trowel, so variations in how many and what kind of artifacts could only be described qualitatively. Careful documentation might have suggested changes

in pottery styles, for example, over the generations.

To explain the unusually deep excavations needed to completely penetrate the middens, Orr believed that the villagers had laboriously covered each layer of garbage and debris on the spot with fresh soil hauled from the surrounding area. The excavations may have been large enough to reveal the layers of contrasting soil. Unfortunately neither pit wall profiles nor floor plans were drawn to document the depth and location of layers and artifacts, which could have shown how the midden accumulated, and possibly reveal

differences in artifact styles or dietary practices. Nor was a map of the test pit locations prepared; written remarks noted only their distance from each other. Orr took all the artifacts from the three pits and mixed them together, with the exception of the two points from Pit 1. If he kept the material Braunschweig

found on the first day of the dig, that too was mixed into the collection.

Nonetheless the Braunshweig (or Waterman's Siding) dig laid the groundwork for future research on various problems. Orr's work showed that the Mill Creek villages contained dense accumulations of well-preserved refuse and that they had been occupied by people who maintained contact with others from distant homelands. Based on the abundant charcoal found in house pits (the villagers burned their lodges when they abandoned the site), future archaeologists would use carbon 14 tests to date the Mill Creek villages to about

"The people who made them were past-masters of the art of decorating — and the shapes!"

— Ellison Orr, September 1934



Fragments of clay disks, with holes drilled in the center. These may have been used as spindle whorls for spinning fibers.

A.D. 1100–1200. Keyes's suggestion that ancestors of the Mandan or their Hidatsa cousins had once lived on Iowa's Little Sioux and its tributaries would also be confirmed. Following up on Orr's ground-breaking work, archaeologists of the 1950s, '60s, and '70s would reveal the layout of Mill Creek houses, study the development of Mill Creek settlement mounds, define the variety of Mississippian trade goods, examine changes in how they farmed and hunted, investigate the possible effects of climate change on people of the Plains, and debate Mill Creek origins and possible reasons for abandoning northwestern Iowa.

ne more achievement emerged from the early investigations along Waterman Creek. Because the three-sided earthen enclosure on the Wittrock farm was largely undisturbed and long recognized as the most important of the Waterman valley fortifications, it was clearly a tar-

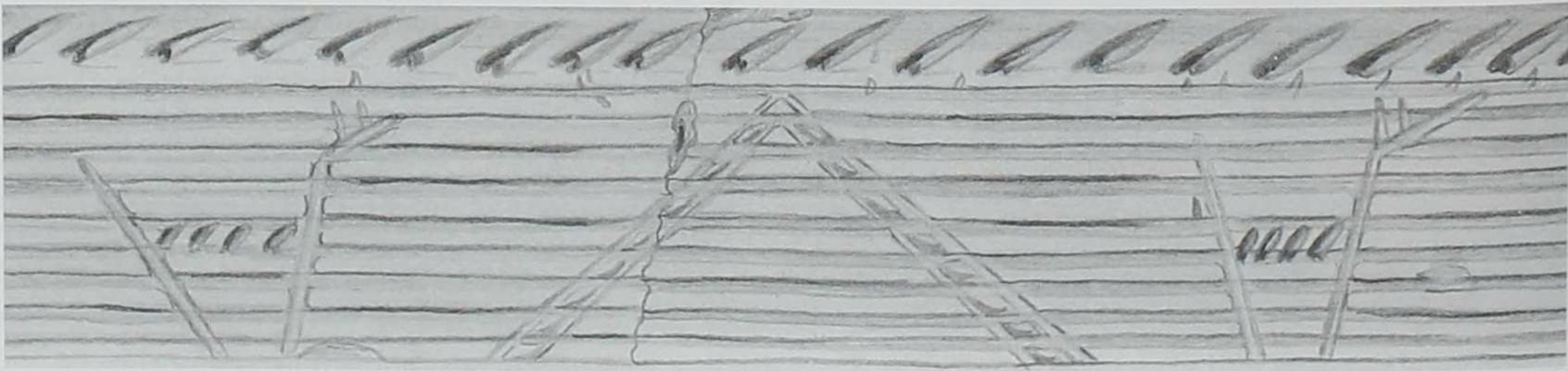
get for acquisition as part of the mission of the Iowa Planning Board. Orr stated the case succinctly: "As this Wittrock site is the only certain Mill Creek culture site not now under cultivation, and, except for desultory digging by 'relic hunters', which might be restored, is intact, it is greatly to be desired that it be preserved, and we unhesitatingly recommend that all possible steps be taken, locally, and by the State Board of Conservation, looking towards that end."

Orr and landowner Alfred Wittrock discussed the sale of the village site to the state. Wittrock requested \$1,500 for a five-acre parcel containing the village. Orr considered the asking price prohibitive. Nonetheless, Keyes and the Planning Board recommended acquisition. George B. MacDonald, state forester and director of the Iowa Office of Emergency Conservation Work, made the trip to Sutherland in mid-May 1936. Accompanied by Kas, he met with the Wittrock family to inspect the site and finalize an agreement. "We staked out an area of about four acres which I believe includes

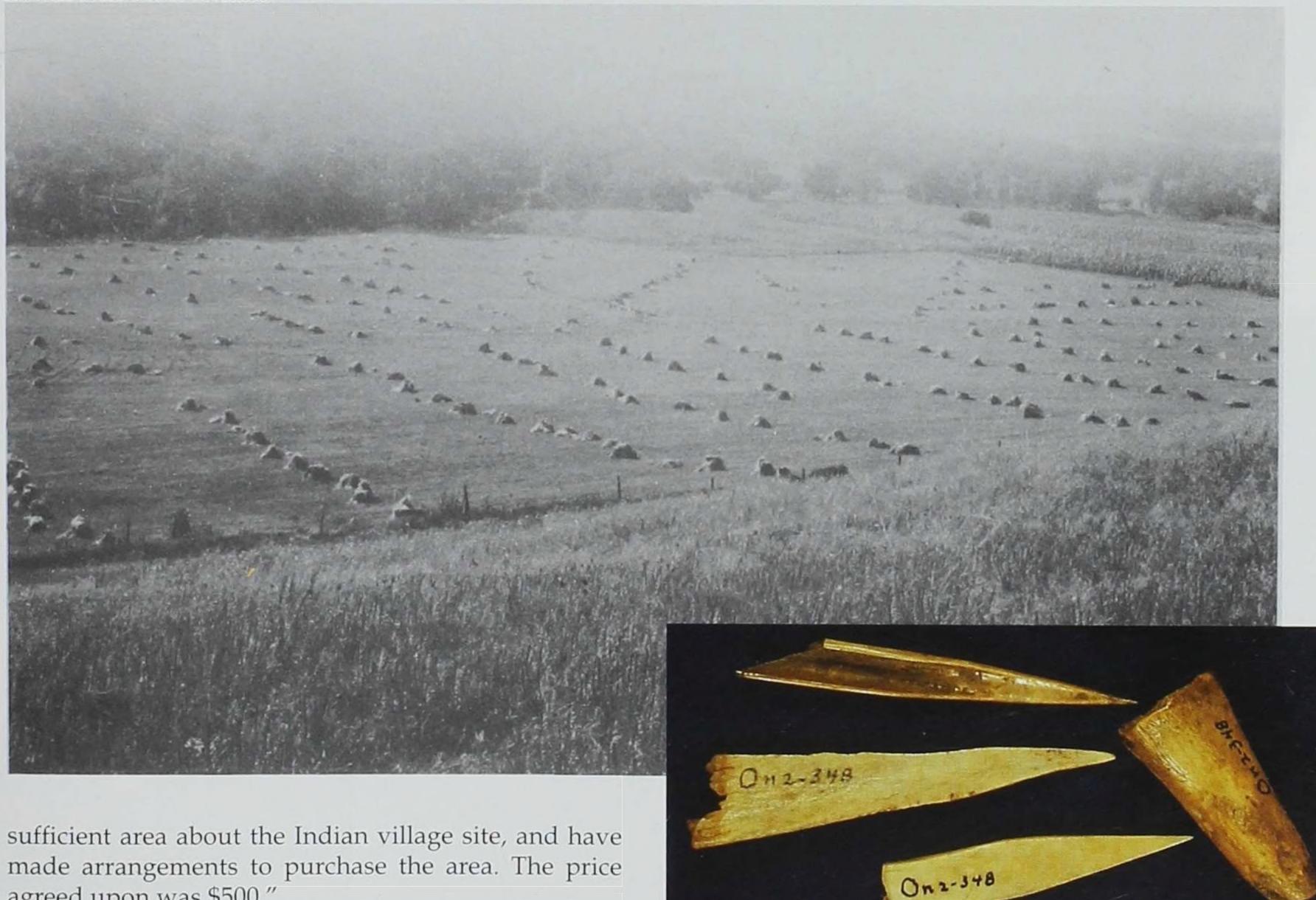




Pottery fragments found at Waterman's Siding. Ancient inhabitants of the village incised the rims with indentations, rows of horizontal lines, and a stylized running-deer motif. The fragment on the left shows only the back portion of a deer; the fragment on the right shows the head, neck, and trunk of another. Below: In this "roll out" drawing of the running-deer motif, two stylized deer flank a large inverted V. The drawing is based on similar pottery fragments found near Sioux City.



THREE IMAGES: OFFICE OF THE STATE ARCHAEOLOGIST; DRAWING BY CHRIS KINEER



agreed upon was \$500."

The transfer was completed in 1937, the third archaeological site and the first ancient village to be permanently preserved by the state. In the mid-1960s, the Wittrock village achieved National Historic Landmark status and then was transferred into the State Preserves System. Iowans owe a debt to Charles Keyes and Ellison Orr for their early investigations in Waterman Township, but also to the early settlers for documenting and describing the earthworks of ancient Waterman Creek, and to the Chicago mapmaker for depicting these mounds and "forts" on the 1911 plat. ❖

Michael Perry is a project archaeologist at the Office of the State Archaeologist in Iowa City. He has written previously for this magazine on Charles Keyes's unpublished manuscript, "Preparing for War in the Fat Land" (Fall 2006).

Bones were shaped into awls, matting needles, and other tools or decorative items, such as the toe-bone "tinkler" (far right). Top: The Wittrock site, photographed on a late summer day in 1940. Trees flank Waterman Creek; the village site lies in the distant grassy area beyond the shocks of grain.

NOTE ON SOURCES

Primary sources that informed this article are manuscripts, correspondence, field notebooks, and county notes archived in the Charles R. Keyes Collection at the Office of the State Archaeologist, Iowa City. A bibliography of specific citations is in the Iowa Heritage Illustrated production files, State Historical Society of Iowa (Iowa City). Published sources include Duane Anderson, Western Iowa Prehistory (Ames: Iowa State University Press, 1975); Jesse D. Jennings, Prehistory of North America (New York: McGraw-Hill, 1974); Charles R. Keyes, "Prehistoric Man in Iowa," Palimpsest (June 1927); George A. Ogle, Standard Atlas of O'Brien County, Iowa (Chicago: George A. Ogle, 1911), digital reproduction from Iowa Digital Library, University of Iowa Libraries. http:// cdm.lib.uiowa.edu/cdm4/document.php?CISOROOT=/maps&CISOPTR= 1425&REC=5; J. L. E. Peck, O. H. Montzheimer, and William J. Miller, Past and Present of O'Brien and Osceola Counties, Iowa (Indianapolis: R. F. Bowen, 1914), vol. I, pp. 484-86; John P. Tandarich and Loren N. Horton, "A Memorial Bibliography of Charles R. Keyes and Ellison J. Orr," Journal of the Iowa Archeological Society, 23 (1976), 45-143; and Joseph A. Tiffany comp., The Keyes Archaeological Collection: A Finder's Guide (Iowa City: State Historical Department, Division of the State Historical Society, 1981).