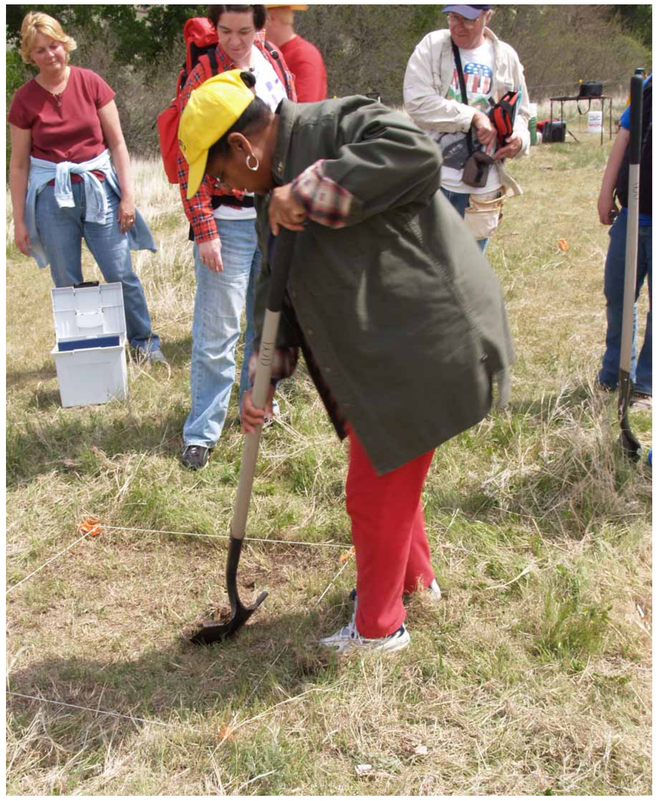
Archeological Testing of Two Dugout Sites by Washburn University (Topeka)

May 15 - June 2, 2006

Tom Johnson family / Henry Williams place House & Cellar Dugouts

Mr. **Veryl Switzer**, owner of the old Henry Williams place, gave the National Park Service and Washburn University permission to test and excavate possible dugout sites. Research through land records by the Nicodemus Historical Society identfied these dugouts as belonging to the **Thomas & Zerena Johnson family**. The Johnson's daughter Emma Williams gave birth to the first baby born in Nicodemus, Henry Williams (1878). **Many families from Nicodemus are direct descendents of the Williams and Johnson families**.

Rancher **Bobby Atkisson**, who runs cattle on Mr. Switzer's land, graciously gave us permission to fence the area around the dugouts. Park Maintenance Worker **Robert Brogden** starts the job of erecting an electric fence. The dugout sites are only vaguely indicated by slight depressions on this slope above the spring.



The two Johnson dugouts were located uphill from an excellent spring. Mr. **Harold Switzer** remembered the spring box was constructed of planks, with a pipe coming out of the hill and a piece of tin over the top. Mr. **Rudolph Bates** remembered carrying water from this spring to neighboring families. Harold Switzer said that he and other children were warned to stay away from the old dugouts because they were in bad shape when he was a youngster.

This dugout location provided an ideal settlement location since water was essential. The large cottonwoods may have been much smaller in the fall of 1877, but now they provide a truely beautiful, shaded setting. Many people from Nicodemus remembered more water in the creek when they were growing up ... and, several remembered swimming in a deep pool of the creek, just to the north of this area.

Because Veryl Switzer was unable to make it out to the site, Ms. **Angela Bates**, Director of the Nicodemus Historical Society, led the students from Washburn in a prayer and then turned over the first shovel of dirt!

This project was funded by a Challenge Cost Share grant from the National Park Service and by Washburn University. Technical assistance was provided by the Nicodemus Historical Society, Mr. Rudolph Bates, the National Park Service's Midwest Archeological Center (Lincoln, Nebraska), the Kansas State Historical Society, and staff at Nicodemus National Historical Site.

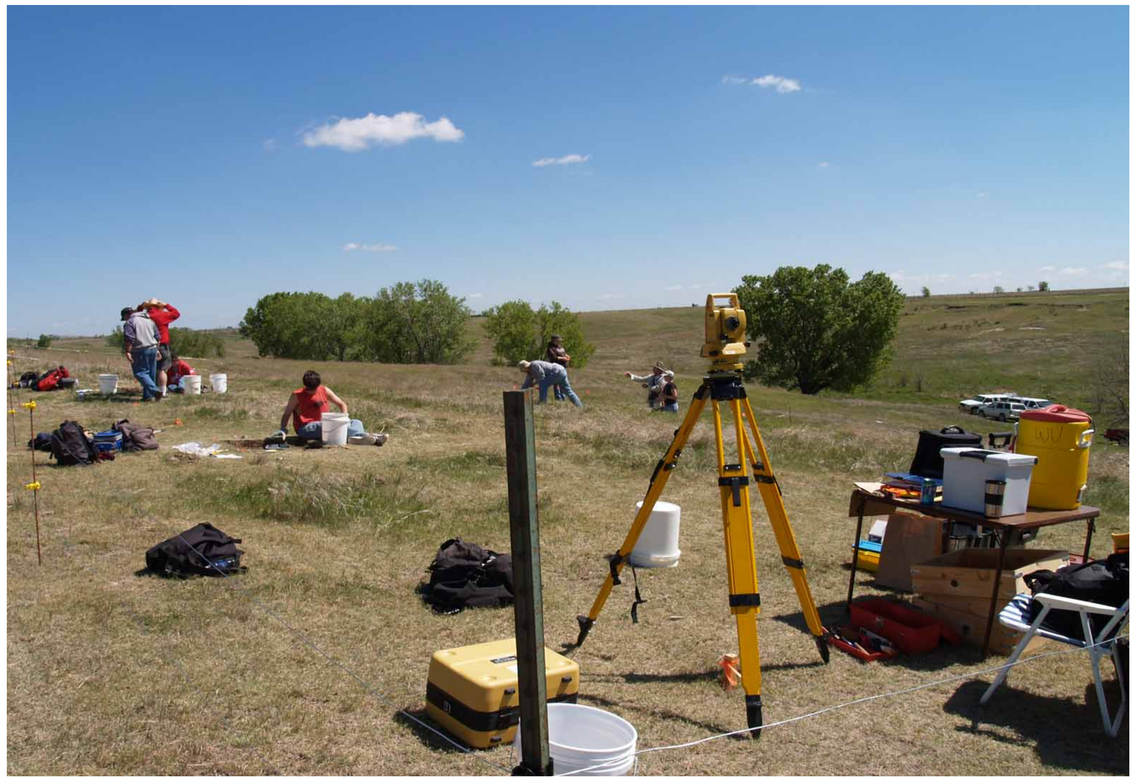
Archeological Testing
Johnson Family Dugouts

The 3-week field school was led by **Dr. Margaret Wood**, professor of Anthropology at Washburn University in Topeka. Ten students (8 from Washburn, 1 from Witchita State, 1from Southern Methodist University) and 2 volunteers participated in excavating test pits. The goals for the project were to determine if the sites were actually dugouts, to provide a real learning experience for students, and to start seeing how these dugout sites compare to previously excavated dugouts. Very little archeological testing has been conducted on dugouts created by African Americans -- so this work is “ground-breaking” in several ways!

How Does Archeology Work??

That’s just what many of the students wanted to know! This was the first time many of them had conducted field work. Margaret began by explaining the basic procedures. One of the first steps is to establish what undisturbed soil looks like, so you can tell when you encounter soil that has been disturbed by human construction.

In the area above the suspected dugout depression, at the top of the slope, several test pits were excavated to determine how the natural soil layers or “profile” appeared. The color of each soil layer--from the brownish-gray soil at the surface created by decaying plant material to the deeper yellowish-brown clay subsoil--was described in detail and recorded.



The entire area encompassing the two suspected dugout depressions was carefully mapped by the Washburn students using precise survey instruments. Two weeks before the field school began, National Park Service archeologists Steve DeVore and Jay Strudevant used advanced instruments (ground-penerating radar and resistivity sensors) to scan the depressions from the surface. Their readings convinced us these were good sites to investigate.

Because the goal of this field school was to confirm that these depressions were dugots, a complete excavation of each dugout was not attempted. Instead, the students dug test pits across the two depressions. Each test pit was laid out as a 1 meter by 1 meter grid and excavated by hand trowels a layer at a time. Each layer was 10 centimeters deep. The student would record any artifacts found and drawings were made to show where they were found in the pit (by depth and relative location within the layer). Lots of paperwork! But, very necessary, so future researchers can understand what was found and where.

Testing the Upper Dugout

At first, we thought the upper dugout site was the Johnson family house location because it was more defined as a depression. **Margaret** taught her students how to lay out a series of the 1 meter x 1 meter test grids across the depression. Top Left: Laying the grids for the test pits in a line from the uphill (west) side, clear across to the downhill (south) side. As each test pit was carefully excavated and the students reached the deeper levels of the dugout, they began to find pieces of glass canning jars, tin lids, and even a cluster of peach pits and jar fragments...possibly from where a jar of canned peaches had broken. Based on these artifacts and what was found in the dugout lower down the slope, it appears the upper dugout was used as a cellar. This arrangement fits what former residents **Bernice** and **Harry Bates** and **Juanita [Williams] Redd** told researchers about the homestead during an interview around 1986.

Right: Dr. Margaret Wood (right) explains to **Mike Corn**, Managing Editor of the *Hays Daily News* how the process works and what was found. In the second pit down the hill (by the ladder), is the original back wall of this cellar dugout. It is shown by undisturbed yellowish soil -- the brown soil above the yellow is where soil drifted over the top of the cellar dugout as it slowly collapsed. The yellow soil to the right and in front of student in the closer pits (which have been excavatted to the original floor) indicate the north and east walls. All the brown soil behind the student is washed-in topsoil that filled the dugout after it was abandoned.

Below: From this view from the south, you can see the north cellar wall behind the student and the front or downhill wall to the right. The door was probably located in the closest pit(bottom). However, there was not sufficent time to confirm if that break in the wall was actually a doorway.

Checking on the progress were (L to R) Mrs. **Ivalee Switzer**, Ms. **Angela Bates**, Dr. Wood, a student, and Mr. **Harold Switzer**.

Testing the Lower Dugout

Students working on the lower dugout site initially thought they had an unexciting site. Then, they uncovered a strip of crushed stone and could not tell whether it was the remains of a surface foundation or the top of a stone wall. Because the top surface was so deteriorated, Dr. Wood had them excavate a series of test pits to each side (north & south) of the pit containing the stone wall. Quickly, they found some very intriguing evidence that this was another dugout site. Steps has been carved into the clay soil on the north side of the wall and they began to find domestic artifacts (see next board) as they reached the floor level. Margaret carefully exposed what turned out to be a well-built stone wall, with a ledge on the interior side and remnants of plaster. However, time ran out for the field school. Did the steps lead into an earlier earthen dugout, which the Thomas Johnson family later improved with stone walls? Or, are the steps contemporary with the stone wall but you had to turn to the left (downhill) and enter along the downhill (east) wall? Perhaps a complete excavation in the future can provide the answers!

Left: The deteriorated top of the stone wall appears in the first test pit of the house dugout. Below Left: Students expose test pits around all sides of the first pit and find that the stone wall (probably the north wall of the dugout) was fairly long. This view is looking west or uphill and the steps are to the right. Many domestic artifacts were found in this dugout-- such as a spoon, buttons, very small fragments of ceramics and glassware, fragments of what may have been a small cream server, etc.

Right: Looking from the west (uphill side), you can see the steps to the north and the stone wall with an interior ledge. The end of the stone wall at the closer end probably represents a corner, although there was not time to dig other test pits to see if there was also a stone wall on the west (uphill) side of the dugout. This structure may have been built only partially below ground, as Margaret (right) is essentially standing on what was the original floor. Perhaps the lower half of this house was built into the ground and the stone wall either extended above the surface... or perhaps it served as a foundation for a framed level above-ground?

Top Left: Dr. Margaret Wood starts the careful excavation of, what turned out to be, a stone wall. The limestone was soft and crumbled at the surface, but it was carefully cut and laid stone as she excavated downward to the original floor level. Top Right: The series of three steps carved into the north side. The elongated holes to the left side may be later tunnels dug by rodents.

And, What Was Found in 2006 ???

Above/Below: Most of the artifacts found were very small. The archeology students used “rocker frames” to carefully sift all the dirt that was removed from the excavated test pits. They pushed the dirt through the rocker’s mesh screen so nothing was missed. Sometimes it was hard to determine whether they were looking at a rusty nail or just a piece of wood!

Above: The foot from a “China doll” was found in the house dug-out. Below: Domestic items like shell buttons, spoons, a small piece of leather with a snap, safety pins, nails, tiny fragments of glass and ceramic were found in the lower house dugout. The upper dugout contained primarily small pieces of canning jars, tin lids, nails, and barbed wire fence pieces.

Archeological Testing of Two Dugout Sites by Washburn University, May 15 - June 2, 2006 Thomas Johnson family / Henry Williams place House & Cellar Dugouts

This project was funded by a Challenge Cost Share grant from the National Park Service and by Washburn University. Technical assistance was provided by the Nicodemus Historical Society, Mr. Rudolph Bates, the National Park Service’s Midwest Archeological Center (Lincoln, Nebraska), the Kansas State Historical Society, and staff at Nicodemus National Historical Site.

The value that comes from the artifacts found at this archeological site--these two 1877-78 dug-outs--comes from **what they can tell us about some the Johnson family and other early settlers in the Nicodemus area!** There is an exciting mix of everyday, ordinary items that people needed to “get by” (like fencing, nails, buttons from overalls) and pieces that represent some luxuary items (like the China doll). Together, items from the Johnson and Williams dug-outs eloquently testify to a family’s perserverence: “We made this our home!”

Dr. Wood with more visitors to the site: **Terry Price** (working on First Baptist Church stabilization), **Twilla Wilson**, and National Park Service employee **Gabriel Diaz** (on a 1-week training detail from Brown v. Board of Education National Historic Site in Topeka).