

## Center for Archaeological Research

### The Big Eddy Site

As you read this, evidence of the first Missourians is being destroyed. For over 10,000 years, beautifully crafted stone spear points and other artifacts have lain along the Sac River in Cedar County exactly where ancient Indians left them, frozen in place by the accumulation of over 10 feet of river sediment. But now the same river that protected the site is destroying it. The bank is quickly eroding sideways, forever depriving us of this unique window into Missouri's, and the nation's, past--unless money can be raised to continue scientific investigations at the site.



*High water continually undercuts the river bank at the site, causing large areas to slump.*

Recognizing that much of this erosion is due to large volumes of water released from the nearby Stockton Dam for power generation, the U.S. Army Corps of Engineers funded archaeological excavations at the site, named Big Eddy, in the summer of 1997. The project was managed by Burns & McDonnell Engineering. When archaeologists from the Center for Archaeological Research at Southwest Missouri State University in Springfield began their work, they only knew for certain that it contained evidence of Indian occupation dating back about 7,000 years. But as work progressed they discovered artifacts that are among the oldest ever found on the continent, finds made even more important because they have not been disturbed since their deposition at least 10,000 to 12,000 years ago.

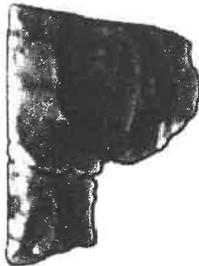
The 1997 excavations were only a beginning. The site can provide a great deal more scientific information, but the continuing erosion (2 to 3 feet per year) necessitates fast action. Unfortunately, obtaining additional government money is a slow process--Corps funds will not be available until the year 2000. Therefore, the SMSU Center for Archaeological Research is seeking donations from individuals and corporations to continue its work at Big Eddy in 1998. Failure to act may rob us of what could be one of the most important archaeological sites in the nation for understanding the earliest Americans.

Many groups of prehistoric Indians chose the Big Eddy site as a place to camp over thousands of years. The adjacent, slow-moving Sac River would have provided foods such as fish, mussels, water fowl, and edible plants, while the surrounding forests and prairies contained other useful plants and various animals such as deer and turkey. Stone was another critical resource; chert, the flintlike rock used to make stone tools, was readily available from the gravel bars of the Sac River and from the steep bluff just across the river.

Archaeologists divide prehistoric time into a series of periods based on general changes in how Indians lived, such as the invention of pottery or the use of agriculture. Within each period, there are numerous subperiods, cultures, and traditions based on common features such as tool types or pottery decoration. At Big Eddy, every major period is represented in the river terrace, with the more recent material near the top and the oldest artifacts 11 to 13 feet deep.

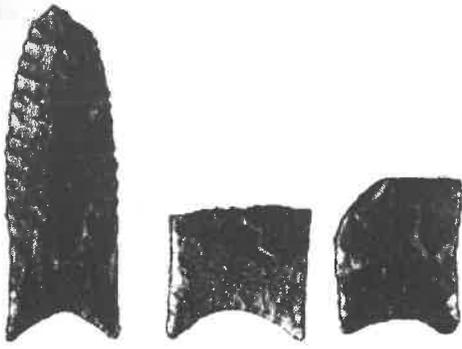
While all the remains at the site are important for understanding various aspects of prehistoric Indian life, the oldest horizons at Big Eddy, which date to the Paleoindian period (10,000 to 12,000 years old), are what make the site critically important. Paleoindian peoples are the first documented inhabitants of the Americas. The ancestors of American Indians entered North America from Asia sometime around 15,000 years ago during the last Ice Age. For several millennia, they left behind only limited, scattered traces of their existence. During the Paleoindian period, there is more evidence of small nomadic bands having spread throughout most of the Americas.

Two Paleoindian cultures are definitely present at Big Eddy, each represented by distinctive types of spear points: Clovis and Dalton. Though carbon 14 dates for these cultures are rare, archaeologists believe Clovis existed from about 12,000 to 11,000 years ago and Dalton from about 11,000 to 10,000 years ago.



*Clovis Culture spear point fragment from Big Eddy.*

Big Eddy is of fundamental importance to understanding early occupation of the Midwest. Paleoindian sites that yield real data on how these people lived are very rare. Spear points from the period are well known throughout the Midwest and other regions. Most often they are found as isolated artifacts on ridge tops or at sites with artifacts from many periods mixed together. While Big Eddy was used by Indians over thousands of years, the gradual build up of the terrace left artifacts from the different periods vertically separated; in archaeological jargon it is a stratified site. Such sites are common in river valleys, but few have produced remains as old as those at Big Eddy.

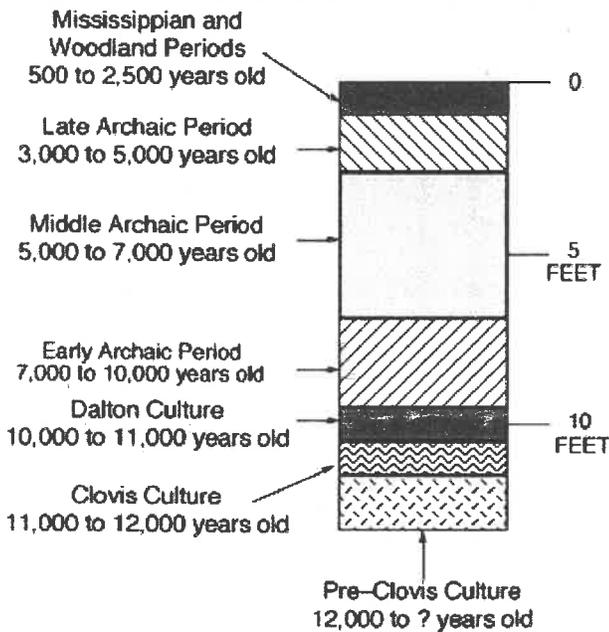


*Dalton projectile points from Big Eddy.*

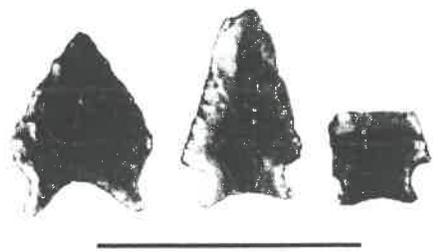
5 CM

This stratification should provide nearly unprecedented data on the Clovis and Dalton cultures. Archaeology is far more than documenting spear points and other eye-catching artifacts; it tries to use the full range of material left by past peoples to understand their environment and how they lived. While styles of spear points tend to change over time, many other tools do not. The manufacture of stone tools also produces many waste flakes, bits of stone discarded as a cobble is shaped into a tool. These flakes can be important clues about how tools were manufactured and where the stone was obtained. In a stratified site all the material associated with each culture can be studied separately.

### CULTURAL LAYERS AT THE BIG EDDY SITE



The sealed, stratified deposits at Big Eddy will also allow archaeologists to study food remains left by the Clovis and Dalton peoples. While the acidic soil at the site has apparently caused animal bone to disintegrate, charcoal is widespread. Some of this charcoal is from plants collected and eaten by the Indians: seeds, nuts, tubers, and other species. Other charcoal is from wood burned in fires, which provides data on what tree species were available to the inhabitants, a clue to the local environment. The charcoal also provides the material used in carbon 14 dating.



*San Patrice projectile points from the Big Eddy.*

The sealed strata will also allow analysis of where particular activities were conducted across the site. Most of the artifacts and waste flakes are exactly where they were left thousands of years ago. In the Dalton stratum, archaeologists uncovered several areas where stone tools were manufactured. Expanded excavations will increase our knowledge of each occupation's spatial organization.

The presence of both Clovis and Dalton strata offers a unique opportunity to study the relationship between these two cultures. Clovis peoples lived in an environment much different from today's. Glaciers still covered large areas of North America. Ice Age animals such as mastodons and mammoths roamed the plains and forests--and were hunted by the Clovis people. By Dalton times these animals were extinct and the climate was rapidly changing. Big Eddy is the first site with the potential to provide evidence about the transition from Clovis to Dalton.

An even more exciting prospect is the possibility that at least one occupation level predating the Clovis culture is present at the Big Eddy site. Several waste flakes and large cobbles were found in a very limited excavation down to 13.5 feet; they were associated with charcoal that was dated to 13,000 years ago. If future excavations fully document such an ancient occupation, we will have discovered one of the oldest sites in the New World.

The importance of the Big Eddy site has already been widely recognized by archaeologists across the country, many of whom visited the site during the 1997 excavations:

"The Big Eddy site has the potential of being one of the most important stratified Paleoindian sites in the country."

--Dr. Dennis Stanford, Chairman, Department of Anthropology, Smithsonian Institution

"This is the first discovery of such a significant multicomponent Paleoindian site in a stratified alluvial context. As such it is a major archaeological discovery."

--Dr. C. Vance Haynes, Regents Professor, University of Arizona

"[Big Eddy] truly may be one of the archaeological 'treasures' of the midcontinent."

--Dr. R. Bruce McMillan, Director, Illinois State Museum

The urgency now is to fully excavate this extremely important site before it is lost forever. Unfortunately, it is very expensive to excavate deep, stratified archaeological deposits. While the lower horizons are the most significant, data must also be recovered from the higher occupations. Excavation requires meticulous, time--consuming hand work as well as large-scale earth moving with heavy machinery. The

excavation crew must also be paid, housed, and fed for up to several months, and various specialists are required to analyze charcoal, reconstruct the geology and environment of the area, and provide carbon dates.

The Center for Archaeological Research is committed to doing everything possible to continue excavations in 1998. But we need the help of people who recognize the importance of saving the knowledge buried at Big Eddy and preserving it for future generations.

---

[Return to CAR's Home Page](#)

Big Eddy Site Radiocarbon Dates

Lab Number	Provenience	Depth	Soil Horizon	Alluvial Member	Weight	Material Dated	C13/C12	RCYBP	Intercept	1s	2s
Late Mississippian											
Beta-117783	Pippins Log	530		Early Pippins	43.48	Wood	-25	490±50	AD1430	AD1415-1450	AD1400-1475
Middle Mississippian											
Beta-112983	Feature 2	25 A2		Upper late Rodgers	18	Wood charcoal	-25	760 ± 70	AD 1280	1225 - 1295	1165 - 1316, 1345 - 1391
Late Archaic											
Beta-112984	TU 5-25	240-250	2Ab	Middle Late Rodgers	30	Wood and nutshell charcoal	-25	4040 ± 100	BC 2568, 2519, 2504	2856 - 2818, 2691 - 2687, 2665 - 2632, 2629 - 2459	2882 - 2284
Beta-109009	Feature 30	252-260	2Ab	Middle Late Rodgers	6.66	Nutshell charcoal	-25	4020 ± 80	BC 2558, 2530, 2497	2615 - 2459	2869 - 2804, 2772 - 2718, 2703 - 2312
AA-29018	TU 2-13	120-130	2Ab top	Upper Middle Rod	0.03	Hickory nutshell	-25.3	4,123±45			2876-2501
AA-29020	Bl-A	160	2Ab bottom	Upper Middle Rod	<0.5	Bark	-24.3	4,130±45			2877-2503
Tx-9328	TU 3-2Ab	90-100	2Ab top	Upper Middle Rodgers		Soil humates	-16.6	4497±57			
Tx-9330	TU 3-2Ab	120-130	2Ab bottom	Upper Middle Rodgers		Soil humates	-15.6	5158±54			
Middle Archaic											
Beta-117781	Cutbank	345	2B13	Lower Late	23.61	Wood charcoal	-25	8110±140	BC7035	7280-6975, 6920-6890, 6845-	7455-6600
Early Archaic											
AA-29019	TU 3	190-192	2B16	Middle Middle Rodgers	<0.02	Wood charcoal	-25	8,190±60			7418-7031
AA-27479	B1-B	251	2B17	Lower Middle Rodgers	0.02	Wood charcoal	-23.7	9525 ± 65	BC 8836, 8816, 8595	8919 - 8874, 8857 - 8793, 8703 - 8694, 8670 - 8471	8974 - 8409
Beta-112982	Cutbank	286		Middle-Late Rodgers contact	10.1	Wood charcoal	-25	9190 ± 90	BC 8182, 8168, 8135, 8101, 8100	8341 - 8301, 8271 - 8083	8418 - 8029
Late Paleoindian											
Tx-9329	Col 3-3Ab	290-300	3Ab	Upper Early Rodgers		Soil humates	-17.9	9450±61			
AA-26653	TU 21-30	298	3Ab	Upper Early Rodgers	~0.1	Charcoal	-26.2	10,185±75			
AA-27487	TU 30-31	306	3Ab	Upper Early Rodgers	0.01	Charcoal	-23.9	10,400 ± 75	BC 10349	10468 - 10205	10572 - 10023
AA-27480	TU 17-31	308	3Ab	Upper Early Rodgers	0.02	Wood charcoal	-24.7	10,340±100	BC10265	10422 - 10060	10552 - 9753
AA-29022	TU 26-32	312-315	3Ab	Upper Early Rodgers	<0.02	Wood charcoal	-25.6	10,430±70			10595-10099
Tx-9325	Col. B-3Ab	310-320	3Ab	Upper Early Rodgers		Soil humates	-17.8	10,336±110			
Transitional Zone											
AA-27488	TU 35-33	321	3Ab/3B1	Upper Early	0.01	Wood charcoal	-24.8	10,470 ± 80	BC 10436	10549 - 10304	10651 - 10143
AA-27485	TU 26-33	322	3Ab/3B1	Upper Early	0.01	Wood charcoal	-24.2	11,280 ± 75	BC 11238	11337 - 11148	11450 - 11060
Clavis											
AA-27481	TU 25-33	326	3B1	Upper Early	0.01	Bark/wood	-19	11,160 ± 75	BC 11119	11210 - 11032	11311 - 10944
AA-25778	TU 22-33	328	3B1	Upper Early	0.001	Wood charcoal		10,260 ± 85			
AA-27486	TU 26-34	331	3B1	Upper Early	0.01	Bark/wood	-21.1	11,900 ± 80	BC 11923	12073 - 11783	12233 - 11657
AA-26654	TU 25-34	333	3B1	Upper Early	~0.05	Charcoal	-24.2	10,710±85			
Tx-9326	Col. 1-3B1	330-340	3B1	Upper Early		Soil humates	-21.4	11,384±107			
AA-27482	TU 25-34	338	3B1	Upper Early	0.01	Wood charcoal	-20.5	11,190 ± 75	BC11148	11241 - 11061	11344 - 10973
Tx-9327	Col. 1-3B1	340-350	3B1	Upper Early		Soil humates	-21.9	11,076±86			
AA-26655	TU 25-35	347	3B1	Upper Early	~0.1	Charcoal	-25.2	10,940±80			
Pre-Clavis											
AA-27483	TU 25-39	384	Top gravel	Middle Early Rodgers	0.005	Wood charcoal	-25.7	11,910 ± 440	BC 11935	12505 - 11430	13178 - 10989
AA-27484	TU 25-40	396	Under gravel	Middle Early	0.005	Wood charcoal	-24.9	12,700 ± 180	BC 13003	13324 - 12684	13624 - 12402
Beta-109008	TU 25-39	409	Under gravel	Middle Early	0.1	Wood charcoal	-25.7	12,940 ± 120	BC 13992	13613 - 13146	13821 - 12882
AA-29021	TU 25-42	412	Under gravel	Middle Early	<0.5	Wood charcoal	-26.9	10,680±60			10820-10478

Subj: ~~Big Eddy drove to the~~  
Date: 7/13/99  
To: delliot@cmc2.cmc.edu

Mike - copy of e-mail sent to  
Dan Elliott

Dan - Re Big Eddy, I went to the site yesterday. It's really something to behold. You won't believe how deep the pit is that they are working. An inclined ramp has been dug down to it (I'm sure with a back hoe) so they can use an over terrain vehicle to bring up the buckets mud, four at a time, for delivery to the wash area, which is something else to behold.

Working in the pits is not like anything I've experienced in the past, and I'm sure for you as well. Each of the the six workers shave the mud/dirt/clay with a sharp shovel in his assigned square, then crouch down to scrape the mud up and put it in pails. All this has to be done with care, measuring the depth all of the time. I wouldn't do this job on a bet.

The wash area is about 3 or 4 feet below ground level. It consists of two cleverly designed wash tables, each with two screens. One or two people can work a screen. Water from the wash tables drains to a much deeper pit. Although there are wooden platforms to stand on, it can get mighty slippery. To get to the wash stands, stairs have been cut into the side of the wash pit, which of course get wet as well. You have to be real careful as you take the screens out of the wash tables and get them and their contents (mostly gravel) to the drying area at ground level. Everything is saved and later bagged when dry. It also gets tricky when you lift a heavy pail of mud down from the side of the wash pit and get it to the table. This was all too much for some one my age so I only stayed for a day.

The site is easy to find. Locate the intersection of Rte.s 13 and 32 on your Missouri map, which is just west of Bolivar. Go west on Rte. 32 for about 30 miles. You pass over the Sac River and make lots of sharp right and left turns, but the road is good. When you get to J, which is about 2 miles east of Stockton, turn to the right (north). Go about 4.5 miles and cross a bridge over the Sac River. Look for a cattle gate on the left soon after you go over the bridge. You'll probably see a few cars parked inside the gate in the catttle pasture. You'll also see a utilily vehicle owned by CAR, which is transportation to the site. It leaves at 8:15 Monday through Friday, unless other arrangements are made. Having a four wheel drive pickup, I drove to the site using a two tire road which backtracks along J to the river and sort of follows it to the site. When you run out of road, you're there. However, just before reaching the site is a barbed wire gate with pink ribbons on it. Open it, let yourself in, close the gate behind you and drive another 100 yards or so to the site. Be sure and close all gates since there are lots of cattle roaming around (including bulls).

The motel to stay at is the Owl Haven Resort, (417) 276-4907. To get to it after a day at the dig, go back on J to Rte 32. Turn right to Stockton which is real close. Go to the center of the town and turn left on Rte. 39. Go a ways and again turn left on RB. You'll see the Owl Haven Resort sign at the turn. A little ways along is the two story Resort on the right, just before getting to a white church building.

Bring your lunch, lots of water, a wide brimmed hat and shoes/boots suitable for a wet surface. I found my beach folding chair might handy to have when just watching.

I thought the visit was well worth while, if for nothing else but to see the site first hand.

I told Jack Ray to expect you both, plus Ed Barlow. He'll be pleased to show you around. Be sure and see the cutbank along the river and the camp area used by the troops.

Enjoy,

Pete

CC MIKE



9-Sep 98  
of Missouri

Missouri State University

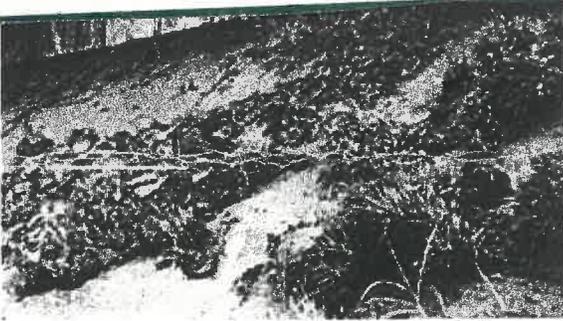
# stockton's BIG EDDY

## Archaeological Research

Archaeologists at Southwest Missouri State University might be onto something big. Big Eddy, an aptly named archaeological site located near Stockton Lake, has provided indications of a culture not previously discovered in North America. The continent's earliest-known culture is the Clovis culture, the beginning of which dates back about 11,300 years. The Big Eddy site has yielded clues, such as radiocarbon dates, of a culture older than the Clovis, called pre-Clovis. But no concrete evidence that connects humans to those clues has been found.

Jack Ray, from SMSU's Center for Archaeological Research, heads the site excavations with Neil Lopinot. Jack explains, "Nobody has definitively shown that pre-Clovis culture exists in North America, yet." The National Geographic Society is one of four sponsors of this summer's investigations. There will be a free presentation of this summer's work at 7 p.m. Sept. 26 at the Stockton Senior Center.

ing destroyed. For over 10,000 years, beautifully long the Sac River in Cedar County exactly where location of over 10 feet of river sediment. But now the bank is quickly eroding sideways, forever the nation's, past--unless money can be raised to



JACK RAY

High water continually undercuts the river bank at the site, causing large areas to slump.

Recognizing that much of this erosion is due to large volumes of water released from the nearby Stockton Dam for power generation, the U.S. Army Corps of Engineers funded archaeological excavations at the site, named Big Eddy, in the summer of 1997. The project was managed by Burns & McDonnell Engineering. When archaeologists from the Center for Archaeological Research at Southwest Missouri State University in Springfield began their work, they only knew for certain that it contained evidence of Indian occupation dating back about 7,000 years. But as work progressed they discovered artifacts that are among the oldest ever found on the continent, finds made even more important because they have not been disturbed since their deposition at least 10,000 to 12,000 years ago.

The 1997 excavations were only a beginning. The site can provide a great deal more scientific information, but the continuing erosion (2 to 3 feet per year) necessitates fast action. Unfortunately, obtaining additional government money is a slow process--Corps funds will not be available until the year 2000. Therefore, the SMSU Center for Archaeological Research is seeking donations from individuals and corporations to continue its work at Big Eddy in 1998. Failure to act may rob us of what could be one of the most important archaeological sites in the nation for understanding the earliest Americans.

1999 NATL. GEOGRAPHIC SOC.

## Center for Archaeological Research

### The Big Eddy Site

As you read this, evidence of the first Missourians is being destroyed. For over 10,000 years, beautifully crafted stone spear points and other artifacts have lain along the Sac River in Cedar County exactly where ancient Indians left them, frozen in place by the accumulation of over 10 feet of river sediment. But now the same river that protected the site is destroying it. The bank is quickly eroding sideways, forever depriving us of this unique window into Missouri's, and the nation's, past--unless money can be raised to continue scientific investigations at the site.



JACK RAY

High water continually undercuts the river bank at the site, causing large areas to slump.

Recognizing that much of this erosion is due to large volumes of water released from the nearby Stockton Dam for power generation, the U.S. Army Corps of Engineers funded archaeological excavations at the site, named Big Eddy, in the summer of 1997. The project was managed by Burns & McDonnell Engineering. When archaeologists from the Center for Archaeological Research at Southwest Missouri State University in Springfield began their work, they only knew for certain that it contained evidence of Indian occupation dating back about 7,000 years. But as work progressed they discovered artifacts that are among the oldest ever found on the continent, finds made even more important because they have not been disturbed since their deposition at least 10,000 to 12,000 years ago.

The 1997 excavations were only a beginning. The site can provide a great deal more scientific information, but the continuing erosion (2 to 3 feet per year) necessitates fast action. Unfortunately, obtaining additional government money is a slow process--Corps funds will not be available until the year 2000. Therefore, the SMSU Center for Archaeological Research is seeking donations from individuals and corporations to continue its work at Big Eddy in 1998. Failure to act may rob us of what could be one of the most important archaeological sites in the nation for understanding the earliest Americans.

1999 NATL. GEOGRAPHIC SOC.

Many groups of prehistoric Indians chose the Big Eddy site as a place to camp over thousands of years. The adjacent, slow-moving Sac River would have provided foods such as fish, mussels, water fowl, and edible plants, while the surrounding forests and prairies contained other useful plants and various animals such as deer and turkey. Stone was another critical resource; chert, the flintlike rock used to make stone tools, was readily available from the gravel bars of the Sac River and from the steep bluff just across the river.

Archaeologists divide prehistoric time into a series of periods based on general changes in how Indians lived, such as the invention of pottery or the use of agriculture. Within each period, there are numerous subperiods, cultures, and traditions based on common features such as tool types or pottery decoration. At Big Eddy, every major period is represented in the river terrace, with the more recent material near the top and the oldest artifacts 11 to 13 feet deep.

While all the remains at the site are important for understanding various aspects of prehistoric Indian life, the oldest horizons at Big Eddy, which date to the Paleoindian period (10,000 to 12,000 years old), are what make the site critically important. Paleoindian peoples are the first documented inhabitants of the Americas. The ancestors of American Indians entered North America from Asia sometime around 15,000 years ago during the last Ice Age. For several millennia, they left behind only limited, scattered traces of their existence. During the Paleoindian period, there is more evidence of small nomadic bands having spread throughout most of the Americas.

Two Paleoindian cultures are definitely present at Big Eddy, each represented by distinctive types of spear points: Clovis and Dalton. Though carbon 14 dates for these cultures are rare, archaeologists believe Clovis existed from about 12,000 to 11,000 years ago and Dalton from about 11,000 to 10,000 years ago.



*Clovis Culture spear point fragment from Big Eddy.*

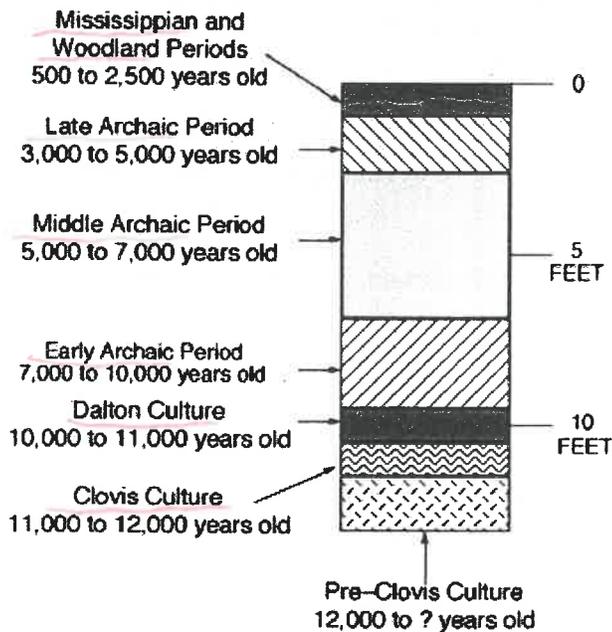
Big Eddy is of fundamental importance to understanding early occupation of the Midwest. Paleoindian sites that yield real data on how these people lived are very rare. Spear points from the period are well known throughout the Midwest and other regions. Most often they are found as isolated artifacts on ridge tops or at sites with artifacts from many periods mixed together. While Big Eddy was used by Indians over thousands of years, the gradual build up of the terrace left artifacts from the different periods vertically separated; in archaeological jargon it is a stratified site. Such sites are common in river valleys, but few have produced remains as old as those at Big Eddy.



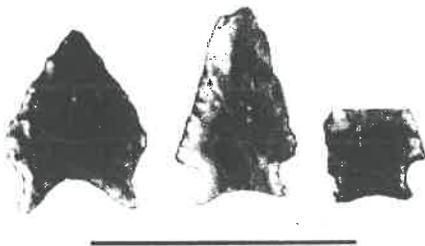
*Dalton projectile points from Big Eddy.*

This stratification should provide nearly unprecedented data on the Clovis and Dalton cultures. Archaeology is far more than documenting spear points and other eye-catching artifacts; it tries to use the full range of material left by past peoples to understand their environment and how they lived. While styles of spear points tend to change over time, many other tools do not. The manufacture of stone tools also produces many waste flakes, bits of stone discarded as a cobble is shaped into a tool. These flakes can be important clues about how tools were manufactured and where the stone was obtained. In a stratified site all the material associated with each culture can be studied separately.

MAJOR CULTURAL LAYERS AT THE BIG EDDY SITE



The sealed, stratified deposits at Big Eddy will also allow archaeologists to study food remains left by the Clovis and Dalton peoples. While the acidic soil at the site has apparently caused animal bone to disintegrate, charcoal is widespread. Some of this charcoal is from plants collected and eaten by the Indians: seeds, nuts, tubers, and other species. Other charcoal is from wood burned in fires, which provides data on what tree species were available to the inhabitants, a clue to the local environment. The charcoal also provides the material used in carbon 14 dating.



*San Patrice projectile points from the Big Eddy.*

The sealed strata will also allow analysis of where particular activities were conducted across the site. Most of the artifacts and waste flakes are exactly where they were left thousands of years ago. In the Dalton stratum, archaeologists uncovered several areas where stone tools were manufactured. Expanded excavations will increase our knowledge of each occupation's spatial organization.

The presence of both Clovis and Dalton strata offers a unique opportunity to study the relationship between these two cultures. Clovis peoples lived in an environment much different from today's. Glaciers still covered large areas of North America. Ice Age animals such as mastodons and mammoths roamed the plains and forests--and were hunted by the Clovis people. By Dalton times these animals were extinct and the climate was rapidly changing. Big Eddy is the first site with the potential to provide evidence about the transition from Clovis to Dalton.

An even more exciting prospect is the possibility that at least one occupation level predating the Clovis culture is present at the Big Eddy site. Several waste flakes and large cobbles were found in a very limited excavation down to 13.5 feet; they were associated with charcoal that was dated to 13,000 years ago. If future excavations fully document such an ancient occupation, we will have discovered one of the oldest sites in the New World.

The importance of the Big Eddy site has already been widely recognized by archaeologists across the country, many of whom visited the site during the 1997 excavations:

"The Big Eddy site has the potential of being one of the most important stratified Paleoindian sites in the country."

--Dr. Dennis Stanford, Chairman, Department of Anthropology, Smithsonian Institution

"This is the first discovery of such a significant multicomponent Paleoindian site in a stratified alluvial context. As such it is a major archaeological discovery."

--Dr. C. Vance Haynes, Regents Professor, University of Arizona

"[Big Eddy] truly may be one of the archaeological 'treasures' of the midcontinent."

--Dr. R. Bruce McMillan, Director, Illinois State Museum

The urgency now is to fully excavate this extremely important site before it is lost forever. Unfortunately, it is very expensive to excavate deep, stratified archaeological deposits. While the lower horizons are the most significant, data must also be recovered from the higher occupations. Excavation requires meticulous, time--consuming hand work as well as large-scale earth moving with heavy machinery. The

excavation crew must also be paid, housed, and fed for up to several months, and various specialists are required to analyze charcoal, reconstruct the geology and environment of the area, and provide carbon dates.

The Center for Archaeological Research is committed to doing everything possible to continue excavations in 1998. But we need the help of people who recognize the importance of saving the knowledge buried at Big Eddy and preserving it for future generations.

---

[Return to CAR's Home Page](#)

Big Eddy Site Radiocarbon Dates

Lab Number	Provenience	Depth	Soil Horizon	Alluvial Member	Weight	Material Dated	C13/C12	RCYBP	Intercept	1s	2s
Late Mississippian											
Beta-117783	Pippins Log	530		Early Pippins	43.48	Wood	-25	490±50	AD1430	AD1415-1450	AD1400-1475
Middle Mississippian											
Beta-112983	Feature 2	25 A2		Upper Late Rodgers	18	Wood charcoal	-25	760 ± 70	AD 1280	1225 - 1295	1165 - 1316, 1345 - 1391
Late Archaic											
Beta-112984	TU 5-25	240-250	2Ab	Middle Late Rodgers	30	Wood and nutshell charcoal	-25	4040 ± 100	BC 2568, 2519, 2504	2856 - 2818, 2691 - 2687, 2665 - 2632, 2629 - 2459	2882 - 2284
Beta-109009	Feature 30	252-260	2Ab	Middle-Late Rodgers	6.66	Nutshell charcoal	-25	4020 ± 80	BC 2558, 2530, 2497	2615 - 2459	2869 - 2804, 2772 - 2718, 2703 - 2312
AA-29018	TU 2-13	120-130	2Ab top	Upper Middle Row	0.03	Hickory nutshell	-25.3	4,125±45			2876-2501
AA-29020	BL-A	160	2Ab bottom	Upper Middle Row	<0.5	Bark	-24.3	4,130±45			2877-2503
Tx-9328	TU 3-2Ab	90-100	2Ab top	Upper Middle Rodgers		Soil humates	-16.6	4497±57			
Tx-9330	TU 3-2Ab	120-130	2Ab bottom	Upper Middle Rodgers		Soil humates	-15.6	5158±54			
Middle Archaic											
Beta-117781	Cutbank	345	2B13	Lower Late	23.61	Wood charcoal	-25	8110±140	BC7035	7280-6975,6920-6890,6845-	7455-6600
Early Archaic											
AA-29019	TU 3	190-192	2B16	Middle Middle Row	<0.02	Wood charcoal	-25	8,190±60			7418-7031
AA-27479	B1-B	251	2B17	Lower Middle Rodgers	0.02	Wood charcoal	-23.7	9525 ± 65	BC 8836, 8816, 8595	8919 - 8874, 8857 - 8793, 8703 - 8694, 8670 - 8471	8974 - 8409
Beta-112982	Cutbank	286		Middle-Late Rodgers contact	10.1	Wood charcoal	-25	9190 ± 90	BC 8182, 8168, 8135, 8101, 8100	8341 - 8301, 8271 - 8083	8418 - 8029
Late Paleoindian											
Tx-9329	Col. 3-3Ab	290-300	3Ab	Upper Early Rodgers		Soil humates	-17.9	9450±61			
AA-26653	TU 21-30	298	3Ab	Upper Early Rodg	~0.1	Charcoal	-26.2	10,185±75			
AA-27487	TU 30-31	306	3Ab	Upper Early Rodg	0.01	Charcoal	-23.9	10,400 ± 75	BC 10349	10468 - 10205	10572 - 10023
AA-27480	TU 17-31	308	3Ab	Upper Early Rodg	0.02	Wood charcoal	-24.7	10,340±100	BC10265	10422 - 10060	10552 - 9753
AA-29022	TU 26-32	312-315	3Ab	Upper Early Rodg	<0.02	Wood charcoal	-25.6	10,430±70			10595-10099
Tx-9325	Col. B-3Ab	310-320	3Ab	Upper Early Rodgers		Soil humates	-17.8	10,336±110			
Transitional Zone											
AA-27488	TU 35-33	321	3Ab/3B1	Upper Early	0.01	Wood charcoal	-24.8	10,470 ± 80	BC 10436	10549 - 10304	10651 - 10143
AA-27485	TU 26-33	322	3Ab/3B1	Upper Early	0.01	Wood charcoal	-24.2	11,280 ± 75	BC 11238	11337 - 11148	11450 - 11060
Clovis											
AA-27481	TU 25-33	326	3B11	Upper Early	0.01	Bark/wood	-19	11,160 ± 75	BC 11119	11210 - 11032	11311 - 10944
AA-25778	TU 22-33	328	3B11	Upper Early	0.001	Wood charcoal		10,260 ± 85			
AA-27486	TU 26-34	331	3B11	Upper Early	0.01	Bark/wood	-21.1	11,900 ± 80	BC 11923	12073 - 11783	12233 - 11657
AA-26654	TU 25-34	333	3B11	Upper Early	~0.05	Charcoal	-24.2	10,710±85			
Tx-9326	Col. 1-3B1	330-340	3B11	Upper Early	~0.1	Soil humates	-21.4	11,384±107			
AA-27482	TU 25-34	338	3B11	Upper Early	0.01	Wood charcoal	-20.5	11,190 ± 75	BC11148	11241 - 11061	11344 - 10973
Tx-9327	Col. 1-3B1	340-350	3B11	Upper Early		Soil humates	-21.9	11,076±86			
AA-26655	TU 25-35	347	3B11	Upper Early	~0.1	Charcoal	-25.2	10,940±80			
Pre-Clovis											
AA-27483	TU 25-39	384	Top gravel	Middle Early Rodgers	0.005	Wood charcoal	-25.7	11,910 ± 440	BC 11935	12505 - 11430	13178 - 10989
AA-27484	TU 25-40	396	Under gravel	Middle Early	0.005	Wood charcoal	-24.9	12,700 ± 180	BC 13003	13324 - 12684	13624 - 12402
Beta-109008	TU 25-39	409	Under gravel	Middle Early	0.1	Wood charcoal	-25.7	12,940 ± 120	BC 13992	13613 - 13146	13821 - 12882
AA-29021	TU 25-42	412	Under gravel	Middle Early	<0.5	Wood charcoal	-26.9	10,680±60			10820-10478