All about Gault

The famous Gault site in east-central Texas is a made-to-order classroom for training future scientists. After all, it was a Clovis quarry, workshop, and campsite, and it was occupied by Clovis people longer than any other site known in North America. The research done by a team of TAMU graduate students, each concentrating on a specific detail of the archaeology, will be published in a volume that promises to be as detailed and comprehensive as any study of Clovis context and lithic technology. Debilitage—around 60,000 flakes chipped off by Clovis knappers—expedient tools, and spatial patterning of lithic evidence are the responsibility of doctoral candidate Charlotte Kenny, here measuring an excavation unit in 2000. The story of Char and her dedicated colleagues begins on page 17.
KENNEWICK MAN STILL IN LEGAL LIMBO

Robson Bonnichsen, Director of the Center for the Study of the First Americans, and the other scientists who took the federal government to court to defend their right to study the remains of Kennewick Man won their landmark case, but have not yet been able to begin their examination of these 9,000-year-old bones. In August 2002, U.S. Magistrate Judge J. J. Elek announced his ruling striking down the Department of the Interior's decision to give three remains to a coalition of Native American tribes for repatriation (MT 18-1). The government and the claimants tribes appealed Jelek's decision, but a panel of judges in the U. S. Court of Appeals for the Ninth Circuit affirmed the scientists' right to study the skeleton, ruling that "no cogent link exists between Kennewick Man and modern tribes of the Columbia Plateau Indians" (MT 19-1). The tribal coalition petitioned the Ninth Circuit Court to rehear the case, but the court denied the petition unanimously (MT 19-2). At this point, the tribes and the government declined to appeal the decision to the U. S. Supreme Court, as continued on page 18.

Another Attempt to Amend NAGPRA

What Is the Significance of "Is"?

By Peter M. Steidinger

DISCREETLY TUCKED AWAY in Senate bill 9245, Senator Benjamin Nighthorse Campbell has proposed a seemingly minor amendment to a definition in the Native American Graves Protection and Repatriation Act (NAGPRA). Section 14 of S.2845 proposes to add the words "or was" after the word "is" in Section 2(9) of NAGPRA. If the bill is passed, the implications of this proposed change will be profound.

Before going any further, it is necessary to understand what "is" is. Section 2(9) of NAGPRA is the definition of "Native American." Under NAGPRA, "Native American" means "of, or relating to a tribe, people, or culture that is indigenous to the United States." The importance of "is" in this definition was highlighted in the Kennewick-Man case. It was upon the present tense of this definition (i.e., "is") that Judge Jelek declared that Kennewick Man must be related to a currently existing culture to maintain a valid NAGPRA claim. Thus the significance of the word "is" is substantial.
The team, led by archaeologist Vladimir Plotko, spent the 2001 and 2002 seasons studying Yana RHS before publishing its preliminary findings in the 2 January 2004 issue of Science. In addition to their emphasis on the great age of the site, Plotko and his colleagues suggested, based on technological factors, that the Yana people might be ancestral to the Paleo-Indians of North America. These conclusions touched off a flurry of controversy that seems likely to continue until other Yana-like sites can be found and studied sufficiently to settle the issue.

The basics of the Yana discovery were discussed in the first part of this article, "The Siberian Connection" (MT 19-20). The second part of the article, "The Implications" (MT 19-20), covered the various archaeological, geographical, and social implications of the find. This final segment deals with the controversies sparked by the conclusions of Plotko's team. Although the find is clearly ancient, not everyone agrees on its meaning or import; the interpretation of the site, and its implications, vary considerably among the interested parties. In this article, we'll present the various points of view contributing to this debate.

Digging up bones

One thing no one finds fault with is the science: Plotko's field methods, the data, and the basic conclusions drawn seem solid. The find is well documented, both graphically and textually, and the radiocarbon dates are plentiful and correspond nicely with the other. But what about cold-site processes, which are known to affect artifact distribution in sites like these? Yaroslav Kuzmin, of Vladimir's Pacific Institute of Geography, doesn't think this is a significant worry. "Cryoturbation could move artifacts and faunal material," he concedes, "but the direct dating of mammoth and woolly rhinoceros bones at the site overrides this factor." He doesn't caution that the mammoth and rhino data should be considered maximal, owing to potential use of subfossil bones by ancient people. This raises the prospect that people were nailing 30,000-year-old bone concentrations for tools much later on, but several factors argue against this possibility. Many of the bones display evidence of butchering, which would have occurred when they were fresh. Moreover, many bones are broken into small fragments, despite no indication of having been rolled by running water; in the natural state most bones are found or only slightly fractured. Also, one dated bone contained a small stone flake, evidently part of a stone tool. Finally, the radiocarbon ages derived from the bones themselves match the dates from other materials in the cultural layers, such as charcoal.

Some observers point out that nearly all the material from Yana has come from secondary contexts. Many artifacts had eroded out of the beach and gravel bars, some had eroded from exposures, and some were found in situ in blocks of sediment that had slipped out of the riverbanks. Artifacts are also known to occur in situ in the site context itself, but none of the material described by Plotko et al. derives from formal archeological excavations. "From what I've seen so far Yana looks really promising," muses Ted Goebel of the University of Nevada, Reno, a specialist in Siberian and Paleolithic cultures, "and it could well be that they've found the site that we've been looking for up there, but they really need to do some excavating to prove their point." He concludes that "what we've seen so far looks really good, but this should be the next stage of work on this site."
Dr. Goebel recognizes the difficulty in performing excavations in an area plagued by permafrost, where the surface soils may stay frozen until afternoon even in high summer. "There are so many frozen-ground processes that could impact such a site, making it very hard to dig," he points out. "There are some sites I've seen where all the artifacts occur inside ice wedges. This is one of the reasons I think the site needs some more work. Pitulko understands the necessity for this, but it's a really hard thing to do, and it may be impossible to formally excavate the site with the technology we have now."

Stirring the pot of controversy

Two hypotheses, one virtually proven and the other of tenacious verity, dominate the Yana debates. For most researchers, the significance of Yana BSH is that the fact proves humans were in the Siberian Arctic before the Last Glacial Maximum (LGM), approximately 30,000 years ago, much earlier than expected. Granted, this was probably just a seasonal base camp for people who hurried back south when winter came; no permanent occupation of the area was likely, even during a glacial interstadial. Less likely is the suggestion, based on some aspects of the material technology, that the Yana people were directly ancestral to North America's Clovis people c. 11,000-12,000 BCYBP. Although this scenario is a favorite of the media, a number of factors militate against it. One is the sheer chronologic
cal gap dividing the two cultures. It's true that an early entry into the New World would be necessary to explain Monte Verde, Cactus Hill, recent Mexican finds, and potentially older sites like Meadowcroft Rockshelter, but most ar
cahlologists believe that 16,000 years is simply too great a time gap, absent firm evidence of intermediate cultures.

Much has been made by Pitulko's team and others of the similarities be
continued on page 7

MAMMOTH TRUMPET

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Mammoth Trumpet, Statement of Our Policy

Many recent years have passed since the Fed Research Program was created and the acceptance of research results by the scientific community. To facilitate communication among all interested interested in studying prehistoric materials, the Mammoth Trumpet, a four-page news magazine, provides a forum for reporting, discussing new and potentially commercial information important to understanding the peopling of the Americas. We encourage submission of articles to the Managing Editor and letters to the Editor. Views published in the Mammoth Trumpet are the views of the contributor, and do not reflect the views of the editor or Center personnel.

—Robert Bronkman, Director
are clustered in an area northwest of the Tanana River conjunction with Shaw Creek. These sites are very similar not just in age, but also in stratigraphy, since they all exhibit profiles of frost-shattered felic gray taken over by undisturbed eolian sands and glacier loess. Their stratigraphic integrity is excellent, with the exception of root action in the upper 30 cm (about 12 in), so serious disturbances were observed, suggesting that the older cultural remains deposit intact. Paleosol buried soils within the deposits indicate extended periods of stability.

In the past decade or so, archaeologists have experienced a renaissance of thought regarding the first Americans. New findings have brought into question our assumptions about the just their cultural identity, but also the timing and means of their entry into the New World. Most researchers still subscribe to the Beringian theory, which holds that Northeast Asians crossed the Bering land bridge into Alaska 12,000-13,000 years ago, thus followed an ice-free corridor south into the continental interior, where they gave rise to the Clovis culture—the earliest widely recognized cultural manifestation in North America. For a time, this model seemed so certain that it was for all practical purposes enshrined as a paradigm. But new discoveries, particularly at a site in eastern Alaska, have shaken it right down to its roots.

Swan Point is one of a number of early sites scattered throughout Alaska's Tanana River Valley, between the Alaska Range and the Tanana-Yukon Uplands. The evidence unearthed there plainly demonstrates that humans were in North America by at least 14,000 years ago, and were part of a pre-Beringian culture that extended from Siberia to eastern Alaska. It's difficult to overstate the significance of Swan Point, given that the site offers the earliest reliably dated cultural remains on the continent. Not only does it predate Clovis by a comfortable margin, it predates by a good thousand year the opening of the ice-free corridor so important to the Beringian theory. According to Charles Holmes, an Alaskan archaeologist with extensive experience at Swan Point, "archaeological evidence from the early Tanana Valley sites is at the heart of the debate about Clovis origins. They're also involved in the arguments for and against various peopling of the New World theories."

The Swan Creek sites

The carbonate-rich deposits at the Shaw Creek sites are up to 2 m (about 6 ft) deep, offering an excellent environment for bone preservation. All three sites have produced butchered bird and mammal remains in stratigraphic association with stone tools dating as far back as 14,000 years ago, making these the oldest human-modified remains known in Alaska. Indeed, Swan Point is considered the site with the earliest firm evidence of human occupation in North America—though there's reason to believe the ancestors of the Tanana Valley people arrived in eastern Siberia somewhat earlier than the radiocarbon evidence indicates.

Microblades and Mammoth Ivory

Since its discovery in 1956, the Swan Point site has been the subject of sporadic fieldwork by Dr. Holmes and his colleagues, the last field session occurring in 2003. The site lies on a small bedrock hill in the Shaw Creek Valley, in a marshy region dotted with small ponds and an cient vegetated sand dunes. Its deposits are thinner than those observed elsewhere in the area, extending to just over 1 m (about 3 ft) below the surface. Fortunately, there's no permafrost involved. "We're fortunate at Swan Point because the sediments are well-buried silt and sand overlying frozen bedrock," says Holmes, who until his retirement in May 2004 served as Supervisor Archaeologist and Principal Investigator with the Alaska Department of Natural Resources Office of History and Archaeology. He notes that "the site is only seasonally frozen, thawed by early June." This leaves an excavation window of three months before it freezes again in September.

Of the three known sites in the immediate Shaw Creek area, Swan Point not only has the best-preserved stratigraphy, it also has the most extensive archaeological record, for the site was occupied repeatedly from more than 14,000 years ago until the late prehistoric period. The stratigraphy remains largely undisturbed. The uppermost 25-30 cm (about 10-12 in) of the site has been affected by forest growth, but the underlying deposits show little evidence of mixing and con-
small Chindadu-type projectile points, while utterly lacking microblades; and 2) the Denali complex, dating from about 11,000-6000 CALBP, which was characterized by a burin and microblade tool industry. Microblades, tiny blades produced in bulk from small wedge-shaped cores, were mounted in grooves in bone, antler, or wood tools to form composite implements. They’ve long been used as a Denali cultural marker.

Other chronological markers that don’t fit the paradigm have been generally reinterpreted out of existence or simply rejected. One example is the Chindadu sequence at Hoosy Lake, a site located about 65 km (40 miles) to the west-southwest. The Hoosy Lake deposits include microblade technology in association with the distinctive blace types customarily used to define Denana—a fact that refuses to conform to the classic paradigm. Microblades also occur throughout the

about 4200 ± 40 CBP. Cultural Zone 2, which begins about 50 cm (about 20 in) below, yielded a variety of dates from 20,100 ± 90 to 20,230 ± 80 CBP, while Cultural Zone 4 dates from 11,300 ± 70 to an amazing 12,360 ± 60 CBP—well before the accepted span of dates for Clovis of 11,200-11,500 CBP.

The occupants of Swan Point exploited a variety of mammals and birds for food. Cultural Zone 3 has produced the remains of elk, goose, and ptarmigan; artifacts from Cultural Zone 4 were found in association with mammoth ivory. The ivory date corresponds with charcoal from the same zone, proving that it wasn’t simply scavenged from old deposits by later cultures. This is unequivocal evidence that humans and mammoths coexisted in the area, evidence that is also found at nearby Broken Mammoth.

Cultural chronologies for eastern Beringia are complex and variable, but are generally structured around two broad phases: 1) the Denana complex, an early period lasting until about 11,000 CALBP and marked by blade cores and

Swan Point cultural sequence, even for periods when they’re absent from other sites. Cultural Zone 3 includes artifacts typical of the Denana complex—bifacial points or knives similar to Chindadu and Nenana styles—although there’s little evidence of microblade/burin technology. But Cultural Zone 4, which is significantly older and produced the mammoth ivory, displays a well-developed microblade and burin industry. These are the oldest firmly dated microblades ever found on the American side of Beringia. In fact, artifacts from Cultural Zone 4 at Swan Point more closely resemble artifacts from the Dyalni culture, a widespread Siberian tradition of about the same age, than they do anything from elsewhere in North America.

Reinterpreting the chronology of eastern Beringia

In combination with related work at Broken Mammoth and Mead, research at Swan Point tends to underpin the basic assumptions of the commonly accepted chronologies for eastern Alaska. "For the most part, recent chronologies have placed the Nenana complex at the beginning of the cultural sequence in Alaska," Holmes points out. "To do this means archeologists had to limit the age of the Denali complex, with its defining microblade technology, to younger than Nenana, which was defined by the absence of microblade technology."

But that’s no longer tenable, given the revelations of Swan Point. Particularly daunting is the fact that the microblades and burins from Cultural Zone 4 clearly predate the accepted range for Nenana. In fact, Holmes states confidently that the Swan Point microblade/burin industry "questions the Nenana complex as a valid concept." Furthermore, he doesn’t hesitate to assert that the toolkit from Cul-
tural Zone 4 is based on technologies derived from Siberian cultures; that, in fact, the earliest culture in the Tanana Valley were directly linked to the Dyuktai culture of Siberia, at least until about 70,000 years ago.

"The Tanana Valley in central Alaska was clearly by the eastern extent of a vast, mostly ice-free land mass that extended from Siberia at the end of the Pleistocene," Holms declares. "My interpretation at the early Swan Point archaeological evidence that at this early period, the human demographic of Alaska was a derivative of Siberian peoples." Holms proposes that the occupations predating about 11,000 calBP (13,000 calendar), including Nenana and the pre-Nenana microlith tradition at Swan Point and Healy Lake, be subsumed under a more inclusive Beringian Period, since these cultures sprang from a time when the land connection and a significant cultural connection between Alaska and Siberia still existed. In Holms's estimation "this term should leave Swan Point ridge spalls (A-B) and microliths (C-E), no room to confuse the early Alaskan archaeological cultures with anything that may or may not be happening with cultural developments south of the ice."

The subsequent Transpolaric Period (13,000-2500 calBP) marks a period of widespread climatic change, as the continents became cut off by rising seas. During this phase, as Holms notes in a recent article for Arctic Anthropology, "Athic technology, while grounded in Siberian traditions, became an Alaskan prodigy."

Various regional industries were involved, including the American Paleoarctic and Denali.

A Clovis connection? In an era that's seen a plethora of purported pre-Clovis sites, Swan Point is probably the best supported of the lot. The stratigraphy is mostly clear and undisturbed. The radiocarbon dates are numerous and convincing, and both artifacts and excellent point the picture of a well-defined, very early culture complete with microliths and burins—a culture nearly identical, as far as we can tell, with the contemporary Siberian Dyuktai culture. There's no denying that people were living in the Tanana Valley well before the Clovis culture flourished in the North American heartland; and there's little doubt that they were Siberian in origin.

Holmes sees no connection between the Tanana Valley peoples and Clovis, and he believes that researchers should completely reevaluate their assumptions that such a link must exist. He finds the argument that Clovis has direct Old World origins very weak: the tool forms sometimes used to make the link, such as gravers and scrapers, are too generalized to be meaningful, the diagnostic tool types too different. He suggests that Paleoindians and their descendants likely derived from early cultures that already existed in what is now the contiguous United States, and that they were probably unable to venture into Alaska until the ice-free corridor opened up—whereupon they found an indigenous population already there. "It appears that we should view Clovis as an homogenous and look for its roots closest to the highest concentration of earliest dated sites," Holmes suggests.

How early is early? So far, Swan Point has yielded materials dated to as early as 14,000 years ago (about 12,100 calBP). However, Holms believes there ought to be older sites out there, given the widespread use of two types of obsidian used throughout the Tanana Valley, Group A obsidian from the Wrangell Mountains of eastern Alaska, and Batza Téna (Group B) obsidian from northeastern Alaska. Widely separated groups throughout the state used this material. Holms argues that extensive social interactions across the region were necessary for the raw material to become widely known and distributed by 14,000 years ago, implying a long occupation of the region before then.
Yana River, Siberia

continued from page 3

tweeted Yana and Clovis artifacts, particularly the river and bone dart foreshafts that both cultures shared. But other aspects of the Yana and Clovis toolkits bear no such similarities, and most researchers dismiss a direct connection between the two cultures. David Meltzer of Southern Methodist University believes the similarities arise from independent discovery, a belief echoed by many of his colleagues. Says Yaroslav Kurzin, "It seems the people from Clovis were first to the Americas, due to the fact that very similar types of artifacts can emerge in different places at the same time."

Goebel agrees. "I don't think you can make that conclusion," he asserts. "There's really nothing, as far as the lithic artifacts are concerned, that you can point to as something antecedent to Clovis technology. That's a lot of time-depth, to try to ID a direct ancestral link based on technology or tool form."

A land bridge too far?

The time gap between Yana RHs and Clovis doesn't rule out the possibility that the Yana people might have crossed the Bering Land Bridge. They had the opportunity and technology, and quite probably the will. Nevertheless, many scholars agree with the University of Michigan's C. Loring Brace that Yana RHs, at 1,300 miles from the land bridge, is "too far from the Americas to be considered in the debate about North American settlement."

So we can now add anthropologist John Holodock of the University of Colorado's Institute of Arctic and Alpine Research (INSTAAR), who specializes in human adaptation to cold environments. He opinion, "I don't think that the distance from the Bering Strait is an important consideration. The point is that the Yana RHs locality indicates that people were living—at least on a seasonal basis—in environments that were similar to those on the other side of the strait. The people who occupied Yana River presumably could have occupied sites in Alaska during the same period. The two critical questions are: (1) was there year-round settlement in Beringia at this time? and (2) was there access to mid-latitude North America during this time?"

Goebel is equally dismissive of the distance argument. "In fact, Yana River is one of the closest Paleoindian sites to the Bering Strait," he points out. "It's close enough to be relevant. To say that 1,300 miles would be too far away would mean all Siberian archology is irrelevant to the peoleing of the Americas."

What of "Clovis-first"?

Although the Clovis-first theory continues to dominate discussions on the peoleing of the Americas, Goebel and others still entertain the possibility of a pre-LGM entry into the New World. If this were true, then Clovis ceramics would have bounded smaller populations of people who had arrived earlier. Indeed, given the plethora of recent well-dated evidence ranging from Kennewick Man to 13,000-year-old Mexican tools, it seems reasonable to entertain the possibility that the New World was lastly populated by a mosaic of peoples from locations throughout the Old World, in migrations carried out over a long period of time and by a variety of means and routes—rather than exclusively by northeast Asians, who crossed over the Bering Land Bridge starting 20,000 years ago.

What now?

If nothing else, Yana RHs provides the first well-documented evidence that humans were in Beringia 20,000 years ago. This fact alone yields plenty of archaeological clout; anything further is supposition, although it's fun to say the what-if game. Could Yana people have traveled across the land bridge into North America? All evidence says they could have. They were hardy folk well adapted culturally to the cold, and they knew how and where to find plenty of game. Would it have been easy to make the crossing? Of course not. The million-dollar question is, Did they do it? At this point, no one can say.

A very early entry would neatly wrap up all the controversy surrounding purported North American pre-Clovis sites, as well as the better-dated, better-documented sites like Monte Verde and the recent finds of early skeletons in Mexico. But most interested scholars are hedging their bets on the issue of whether that's what happened. "It could have happened," says Ted Goebel, "but Yana doesn't strengthen the case for Monte Verde or Meadowcroft. Just because it fits the Beringian model doesn't mean that these sites are automatically pre-Clovis. Those sites have to stand on their own. People shouldn't think, 'All right, we have all the answers now, there's nothing left to debate.'" "Yana doesn't necessarily strengthen the Beringian theory," he concludes, "but at least it gives us a place on the map that lets us point to and say, 'People were there before the Last Glacial Maximum.'"
Speakers at the second international symposium "El Hombre Debutante en America" (Early Humans in the Americas) invited generations around the world to discuss knowledge about the earliest peoples in our hemisphere. The symposium, held Oct. 4-9, 1994 at the National Museum of Anthropology in Mexico City, was sponsored by the National Council for Culture and the Arts and the Department of Physical Anthropology, National Institute of Anthropology and History (INAH). A total of 35 presentations were given in the museum's main auditorium, with headphones available for simultaneous translations into Spanish and English. Following each paper, a question-and-answer session encouraged lively exchanges between participants.

Day 1: From Africa to the Americas

Before focusing on the Americas, the symposium began with an address by Donald Johanson, who provided an overview of paleoanthropological studies in Africa. Johanson is currently living in Mexico while writing a new book. The earliest data for anatomically modern humans has been pushed back to 190,000 years ago. These data are based on fossil finds at several sites in Africa dating back to 70,000 years ago. These sites are some of the most important sites in the world. The talk was given at the Symposium on the Americas, and it was attended by several speakers. Johanson highlighted work in Baja California, the Yucatan Peninsula, and South America. His presentation focused on the site of Cocha Ellyseri on Isla Espiritu Santo in the Gulf of California near the Baja Peninsula. He suggested that the site could be the lower stratum of the cave where the earliest archaeological materials have been found. This site may be derived from a human settlement in the area from an ancient shoreline. The earliest unequivocal site for the overhanging sandstone is about 600,000 years old. The date for the overhanging sandstone is based on the earliest occurrence of the human skeleton, which is one of the most important sites in the Americas. The earliest skeleton, known as the original colt, is believed to be the oldest known specimen of early humans. Previous studies at dating these same deposits by means of radiocarbon evidence have yielded much earlier dates (100,000-200,000 years), which are no longer accepted by the investigators. An evening lecture by Laura Litton (National University of La Plata, Argentina) warned of the earliest sites in South America, emphasizing the evidence for aquatic adaptations as well as land environments increased at the end of the Pleistocene.

Day 2: The evolution of early humans and the genetic studies

The day began with lectures on the evolutionary characteristics of the earliest skeletons recovered from Mexico, especially based on cranial molar data. Alejandro Tzecosa described the three skeletons from the underwater cave at Quiriquinta Cave, where several pressures focused on the early skeleton, Teocatepec. It was discovered in 2005 by chance in the Valley of Mexico while digging a well. The burial had intruded into an earlier context approximately 100,000 years ago, and bones of extinct megafauna were present in its vicinity. The context was dolichocraceous, like all other skulls from Mexico dating to ages greater than 100,000 years ago, contrasting with later populations. All the samples consisted of four presentations based on mitochondrial DNA and Y-chromosome studies of North American and Mesopotamian populations. Andrea Bermudez-Castano described the historical context for studies of population genetics in Mexico. Ruy Rodrigo and his co-authors argued that evidence for a single founding population followed by significant genetic drift that led to regional diversification. They noted that mtDNA studies of all early skeletal material tested to date demonstrate that ancient peoples belonged to known haplogroups identified in Native American populations. Genetic evidence
points to southern Siberia as the apparent source area for the founding populations of the Americas. Brian Kemp and Angelica Gonzalez-Olivos (both of UC-Davis) reported on mitDNA and Y-chromosome comparative studies of indigenous populations in central and northern Mexico. Significant differences among populations speaking various Uto-Aztecan languages demonstrate that language spread in prehistory did not necessarily alter the gene pools of local populations.

Day 3: Genetics, and Ocean Passages and Island Settlement in the Clovis Period

The importance of mtDNA studies in understanding the peopling of the Americas was emphasized by Phillip Endicott (Oxford), who put the Americas in world context by demonstrating how mtDNA patterns reflect the rapid dispersal out of Africa of anatomically modern humans followed by regional differentiation. Reporting on collaborative research with his Mexican colleagues (conference hosts Jose Concepcion Jimenez, Sylvia Gonzalez, and Jose Antonio Poma), Endicott revealed that ancient DNA from Peruci skeletons from the tip of Baja California belongs to haplogroups found among other American Indians. Some researchers have argued that the Peruci represent a remnant population of a late-Fleischmann coastal expansion, trapped from further migration by the cold-sea of Baja California; other researchers have proposed that cranio metric resemblance between the Peruci and native Australians may be evidence of an ancient trans-Pacific migration. Based on initial mtDNA evidence, Endicott concludes instead that the Peruci derive from the same ancestral population as other Native Americans.

Before concluding, Endicott outlined an alternative strategy for tackling the problem of how many migrations were responsible for peopling the Americas. Continuing phylegenetic studies of Helicobacter pylori, a pathogen that causes peptic ulcers in humans, suggest that either multiple migrations or a large number of individuals carried this organism into the Western Hemisphere from at least two regions in Asia.

Alvaro Montenegro Neto and colleagues at the University of Victoria, British Columbia evaluated possible trans-oceanic voyages to the Americas based on knowledge of currents and various types of watercraft. These researchers used computer simulations to evaluate the likelihood of landfall from various points of departure in the western Pacific and eastern Atlantic. The presentation was followed by Stuart Fiedel, who maintained that the "Clovis First" model was still the best theory to explain Native American origins. Fiedel made interesting observations regarding the widespread distribution of Clovis points in North America, which contrasts markedly with their extremely rare occurrence in Mexico and replacement by the early "Fishkill" points in South America, which likely were derived from Clovis. He argued that there are problems with demonstrating cultural context for material dated earlier than 11,500 BP, which Fiedel's superluminal evidence led to some of the more amenable exchanges with people in the audience who were clearly advocates for a pre-Clovis population expansion.

The final presentation of the afternoon, by John R. Johnson (Santa Barbara Museum of Natural History) based on collaboration with geologists Thomas Safford, Jr. of Boulder, Colorado, and Thomas Rockwell (San Diego State University), pertained to the stratigraphic context of the Arlington Springs site on Santa Rosa Island off the California coast. Recent dates, derived from charcoal in previously located ecological samples obtained during fieldwork in 2001, bracket the first evidence for human presence on the island to a period between 11,200 and 11,500 BP. Periods of sediment accumulation, soil development, and incision on the island correlate well with known sea level changes, thus providing independent support for the chronologic placement of human entry onto the island.

Day 3 Evening: Early Human Diversity in the Americas

Presentations begin with an overview by Sylvia Gonzalez (Liverpool John Moores University) of her work with David Huddart on the environmental context of human dispersals during the late Pleistocene. In Mexico, she presented results of the most recent dating and DNA analyses, conducted in collaboration with her colleagues in Mexico and Britain, of early skeletal material from central Mexico. An enormous volcanic eruption about 19,500 yr B.P. created a paleo-ash deposit in the Basin of Mexico that provides an independent means of dating certain heavily mineralized human skeletal materials in particu-
The final presentation of the day was by Gary Haynes's address, "Fire-Contact Megalodon Extinctions in the Americas," Haynes (University of Nevada, Reno) examined in detail the timing of extinctions, distributions of megafauna, population estimates, Paleolithic hunting patterns, strategies to human-caused extinctions elsewhere in the world, and taphonomic studies of kill sites. He concluded that clear evidence does not counter the hypothesis that Paleolithic hunting contributed to megafauna extinctions during the terminal Pleistocene.

In the closing ceremony, conference speakers were presented with a bust of Tepexpan Man, based on a well-known early-Mesolithic skeleton found in the Valley of Mexico, by representatives from the present-day Tepexpan community.

Publication of the symposium proceedings is being undertaken by the conference's organizing committee. Based on the quality of this year's presentations, the third symposium on "El Hombre Tepexpan en America," planned for 2004, should be an event to anticipate. We can expect that the "Clovis First" vs. Pre-Clovis question will continue to be the focus of lively debate.

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John Johnson has served as Curator of Anthropology at the Santa Barbara Museum of Natural History since 1988. He received his doctorate from the University of California, Santa Barbara, in 1975, where he currently teaches an upper division course on California Indians. Johnson's research and publications primarily pertain to California Indians, ethnology and prehistory, and he is currently collaborating with physical anthropologists conducting mitochondrial DNA studies on American Indians. He is a past president of the Society for California Archaeology and received the society's Mark Harrington Award for Conservation Archaeology in 2003. Over the last decade, Johnson has coordinated an interdisciplinary team conducting archaeological, geological, and paleoenvironmental studies at Arlington Springs, a Paleoindian site on Santa Rosa Island.
The Treasure
of a
New World

The first of a two-part story by Alan Kirkland

There was a time when the mountains were all fresh,
and the world had just shrugged its shoulders, shaking off the chains of
the great sheets of ice that had held it in a grip of cold, of death.

Now there were new places opened up to the small groups of human
inhabitants of a large continent to the west, and some of those places were
strange and mysterious. Most mysterious of all were the mountains:
that had once belonged to the Ice and snow, and now were
covered with a verdant blanket of thick trees.

These mountains were not just new and good places to hunt; they were also the source of
a wonderful material for tools. Black and slick, with an edge quality so sharp that it would
cut and leave its rugged edge. Obsidian, volcanic glass, a prize to be sought after eagerly,
and once found, hoarded and used by the finest craftsmen, traded by the most enterprising
cultures. Treasures of the mountains.

At this time, human groups were too
small, inefficient, and highly mobile, wandering
over the vast open spaces of the plains
carpeted by seas of grass. They hunted the
great herds of antelope, bison and elk. Once, they
saw the great woolly mammoths while the lands were gripped by the cold and ice,
but those had vanished long since, to be remembered only in tales spun by the fiends
by the shamans and the old men who remember
having hunted them in their youth.

Now the great prairies were the bison, whose
great quantities of meat and thick hides represen
ted times of plenty. Also the elk, which wandered in multitudes among the moun
tain ridges and valleys of what would one day
be recognized as New Mexico. The families and
extended families had wandered in great
glory swings from the north, and finally found themselves
in the mountains that sprawled across the
western part of the great southern deserts. Tricky places, these, because in certain
times there were still rumblings that could be
heard far down in the earth, and some of
the springs welled up with water that was not
cold, but warm, sometimes even hot. Certain
spots of these hunting people drifted down
from the open plains into the mountain country,
and there they stopped, lived, took stock of what they saw. For this was a good
country, with much fresh water, many trees,
and seeming game. It also contained hidden
treasures, for this was also the country of the
black rock, the one that could be made into
the finest tools and spear points. So the
people drifted into this country, and finding
it good to live in, stayed.

Although it was warm on the open plains,
it was still cold in the higher elevations of
the mountains, even though there were not
as high as the Great Mountains that ran the
length of the Sea of Grass, like a great wall.
The group of the people that came into the
abundant end of this mountain country had
decided to stay, but were still seeking some
part of it to claim as their own, the place
wherein they could wander and find the
treasures of game that sustained them. Some of
the more daring and inexpert of the hunters
wandered off on solitary explorations, to seek
ways into the falls and higher ridgelines, ever
looking for the ideal place to report back to
the rest of the People.

A particular part of men, one an excellent
hunter was never seemed to fail to find game
of animals, and one who was not so good at
hunting but was an accomplished maker of
tools, wandered together along the sides
of the mountains, looking for a creek or stream that
would provide a valley that could be
flourished for the heat of the high country.

Days and days they wandered along, felt by the
unceasing desire of the hunter. Ever the
craftsman looked at the rock, the stone boulders
and cobbles that littered the sides of the
ridges. He was seeking something other than
game, he was seeking a prize for making tools.
Together they searched, and one day the
hunter, in pursuit of an elk that ran away with his
prize spear imbedded in its side, followed it in a
valley that had a greening creek flowing
in it, a valley that climbed ever higher into the
strange rounded ridges.

Higher and higher he climbed, following
untiringly the occasional spoor of blood that betrayed the wounded elk he had pursued.
Not only did the elk represent many meals for
several days, his prize spear was imbued in
it, the one that had the magic of a special
point, perhaps made from the mysterious
black rock that was sharper than any other.
He did not want to lose that spear, so he
persisted in trailing the dying animal.

The walls of the mountains rose higher and
higher as he made his way deeper into the
valley, and finally he noticed that he was no
longer just moving between two ridges, but was entering an occasionally arm of several
The fire crackled and snapped, fed with sap-rich branches stripped from a huge downed log. Shadows played on the face of the hunter as he told his story to the craftsman, who had meanwhile speared many fish from another stream drawn in the plain below the domed mountains. While these broke in the coils, the hunter spoke:

"It was midday. There were many clouds in the heaven of the sky, and the breeze was ever so slightly cool. We saw a log up as I was chasing that elk, there was no need for a shirt. The sun was warm on my shoulders, and I was glad of it. All I could think of was to chase the elk I had wounded with my spears, the one the old man had made for me long ago, the one with the special magic. I ran, and climbed, and then ran more. Into this creek valley I ran, and then slowed to cast about for sign. I found the spurs of blood bright against the ground of the grass, and I took up the trail again.

The creek valley was lush and green, with much good timber.

There was only the occasional call of birds to break the silence, accented by the v-e-r-y tound tows, while still I sought the elk, for I knew it would be much good meat. Also I sought to see what there was to this valley, to the high mountains than shibed themselves like rugged, in the domes that looked like the heads of sleeping men, I made my way

About Magik

Today, most people have sort of a garden-variety understanding of what they think magik is. To them, it is personalities like David Copperfield performing in casinos in Las Vegas, doing amazing things with illusion and sophistication special effects. To me, this is charlatanry and not all at what I am talking about in this story. Hence, the spelling of 'magik' shouldn't convey this meaning, nor should it to be taken to mean the neo-pagan stuff that is buzzing about.

To me, magik is the power or energy that nonmaterialial peoples feel permeates the world we live in. This is a deep theme in most Native American society and in the culture of many so-called primitive peoples. The assumption is that the world, as in the living place we inhabit, is alive, and an entity in and of itself, and can understand and communicate with humans when attem t to listen to it. Often the sympotm for this is Power or Mystery and it carries a meaning akin to that of god or gods. Much like the name of Polyeustia, it is something that can be sought for, and installed within various personal objects, such as weapons or specialized tools, particularly those of warcraft or craftsmen. 'Magik' is a spelling I decided upon when trying to get this idea across to some of my colleagues, when I was a boy as to what would one convey what I thought was a more Euro-cultural basis for it. I bit upon this, 'rejected' 'magik,' since that has been used too often by various charlatans to describe occult powers, which are personal and base to one's will for personal gain.
along the ridge face, following it as I searched for a way across, into the valley choked with many fallen trees that were big, huge, mightier than ever I had seen before. The mountains were like a barrier, a wall to my progress in finding the elk and my prey. All I could think was that I must get through, somehow I must get through. There must be a break, an opening in this valley where flows this strong-running water.

"Ever higher I climbed, until it seemed that the grade of ascent would not end. But it did, at last. The encircling mountains swelled up, up, up I followed the swiftly-flowing creek through the ever-deepening notch. It seemed to me I was following a pathway, a break in the rock that yawned like a scarred mouth that kept whispering. This way. And then I saw it, as I stumbled out of the valley and came out of the trees, which were like a curtain thicker than a blazon's hide. All around me the strange and mist-shadowed humped-mountain encircled this great grass-filled plain, like a mother's arms around her child. It was filled with many herds of elk, and deer, and there were many great trees that had never before seen one of the people. I tell you, this is a thing that you must see!"

His excitement was evident, plain upon his face. The light in his eyes outshone that of the fire. To his companion he seemed a man possessed of the spirits, one who has seen things no man had seen before. The craftsman thoughtfully and respectfully replied, "We will go there when it is once more the period of light."

The two men woke in a placid sunlight, the air fairly shimmering with the breath of potential success. Then the face of the hunter fell. "I have lost the specie," he said. "All I have now is my knife."

The craftsman nodded, and thoughtfully turned over in his mind what this might mean. It could not be a good omen for the great hunters to have lost the special specie, but at the same time it might have been a necessary sacrifice to appease the gods for his having found the special county.

"We must go," said the hunter, "for the day waits for none."

Nothing else was said, only the crinkly cloth of his own thoughts, the craftsman mood with cracking knees to join his friend, together they started off on their journey to find the valley again that the hunter had followed to the amazing place-of-many-ell-ends.

They found the valley again, and the strong creek gurgling through the lush ferns and grasses. Walking along its bank, the hunter pointed out the huge boulders, the many head-sized gray-black-spectacles rocks that lay strewn about everywhere. At all these things the craftsman nodded thoughtfully, for he was wise in his own mind that this indeed was a special place, and not just for the reasons the hunter thought so. Everywhere there was the scar of elk and deer, and they also saw many other smaller creatures that all looked like animals that were good to eat. The hunter smiled, for the animals forgetting the path of the loss of his favorite weapon. He eagerly led the path forward, wanting very much to reach the top of the grade in the valley, so that they might descend into the amazing place that he had seen the day before.

Cleaning the tree-line, the path parted upon the river that had evoked such awe and wonder from the hunter the day before, saw the wandering groups of elk feasting unconcerned on the sweet grass of the great meadow they saw spread before them like an enormous bowl rammed about with humped mountains shrouded in mist. Surely this is a place of the gods, thought the craftsman.

"Seer Did I not tell you?" cried the hunter in wristed tones, not wanting it denote the silence.

"Indeed you did, and you did not exaggerate," said the craftsman.

"I wish to do some looking around myself," he said. "Go, go, We will meet here, at this creek, at the setting of the great light."

"The hunter turned to go, intent now to see what the foreboding in his mind, the finding the dead elk that would have his special specie within it. They went their separate ways, each to pursue his own quest, realizing that what each had in his heart was thoughts that would eventually turn to the mutual benefit of both.

The craftsman walked steadily through the ever-widening valley, all the while listening to the gurgling song of the swift-running little creek. His eyes darted this way and that, always looking, always noticing. He was looking for the signs of rock, the way-points of stone, the proof that he was right in his suspicion that there was not only a valley below that watered, but also a place of stone. The actual geography described by our characters is inspired by the valleys of Caldera, a natural volcanic formation in the Jemez Mountains. The actual geography described by our characters is inspired by the valleys of Caldera, a natural volcanic formation in the Jemez Mountains.

The setting, on the North American continent just after the Alchihomnal, in the modern-day state of New Mexico. The actual geography described by our characters is inspired by the ancestors of the Jemez Calderas, a natural volcanic formation in the Jemez Mountains. The Calderas National Preserve was held in trust for the people of the United States. In it was the woodlands where the man salved, as it is still today. The archaeology of the preserve bears witness to its prehistoric times man made tools from the abundant obsidian nodules found at the Cerro Del Medio and Rabbit Mountain. Herds of elk still graze in the Calderas Grandis under the watchful eye of the Cerro La Junta, the small domed-shaped hill called Old-On-Who-Watches-in-the-stone. The creek valley that the man followed is based on the geography of the La Jara Creek, which flows through a natural notch in the encircling mountains.

The Calderas National Preserve was and continues to be a woodland place, a perfect place where people can feel the deep spirit of the land sink into their bones and be saved by the ancestors of the Jemez who today still protect it.

—Alan Kirkland

very good place to live, but also a good place to find the chieftain of his own native work. He scanned the ring of humped mountains, searching for a particular thing, a singular sign that would indicate to him the place where by the rocks that made edges like so other. As he moved slowly through the trees and came out onto the level plain of grass, he saw the little hill like an old man's bald crown dead of head. Though it had trees over all the top of it, he could see that it was an excellent place to observe the entire valley from. He headed for it, quickening his pace.

The hunter also worked his way through the trees, looking for the tiny spots of red, dried by snow, that would indicate to him the presence of his prey, the elk that had carried off his favorite speck. Almost suddenly...
he moved along a trail clearly *debatable* to him, *rel* that before this moment he had never known the foot of a hunter. How he knew this he would not have said, but he did. He was the boy, the only one to have found this place, where the elk were a multitude unaware of the anger that the hunter represented to them. They had known, yet remained, somehow, to be sure, but like this new one. The human being could not match them for speed or strength, but in running he was far superior to them, indeed to any predators they had ever known. Wolves, bears, coyotes, all these were unaware compared with the single-minded determination of the beast that observed them now.

Suddenly the hunter picked up a small handful of aspen leaves that had on them a small spot of dull red. He looked up, eyes now aglow with the thrill of having his efforts rewarded. He moved off as a swift yet careful pace, moving through the trees and fallen logs along the clearly defined trail.

In a few hours he was standing over the partially chewed corpse of the elk. A few feet away he found his blade. It was broken, snapped in two by the elk’s desperate attempt to push itself away, in the attempt to cut it off. He picked up his weapon and filled his heart, and next filled his eyes as he accepted the inequitable will of the gods.

Picking up the pieces of his weapon, he slowly moved away from the dead elk, which he let as an offering to the gods who had taken away his spear. What would he do, the hunter could not say, but he would think of something.

End of Part I

**What Is the Significance of "Is"?**

**continued from page 1**

It is evident that human remains cannot be claimed under NAGPRA unless they are related to modern Native Americans. This limit is consistent with Congress’s original intent for enacting the legislation, to protect the human rights of existing Native Americans and to prevent their exploitation by descendants of their ancestors who have little or no blood ties. The proposed amendment to the “Is” definition would significantly alter the definition to include all human remains, regardless of their relationship to modern Native Americans. This would have important implications for the identification, preservation, and return of human remains. The amendment would also affect the interpretation of the term “Is” in the context of the NAGPRA legislation, which is designed to protect the human rights of living Native Americans and their descendants.

**The Key Question:**

Despite the creation of a seemingly counterintuitive reality for repatriation claims under this new definition, simply being able to make a claim for repatriation under NAGPRA is not tantamount to actually being allowed to repatriate items. Any such claim would still have to pass muster under the ownership priority provisions of Section 304 of NAGPRA. Under these provisions, ownership would remain unaffected by the proposed changes in S.2843. Briefly, Section 304 looks to the following groups to determine ownership:

- (1) lineal descendants of the Native American remains;
- (2) the absence of lineal descendants, the items may be repatriated by:
  - the group with whom tribal land is discovered; and
  - the group with the closest cultural affiliation; and
- (3) if cultural affiliation cannot be determined, then to the tribe legally recognized as having aboriginally occupied the federal land on which the remains were discovered (or another group by a preponderance of the evidence).

The major problem is that, if S.2843 passes, the expansion of the term “Is” (the term NAGPRA currently uses to identify lineal descendants) would not be expanded because it would remain unchanged. Thus, the proposed definition is problematic in that the lineal descendants must refer to actual, documentable descendants. This issue is consistent with Congress’s intent to have NAGPRA authorize for repatriation of close relatives’ remains.

About the author.

Alan Kirkland, a professional archaeologist for over 20 years, has written extensively in North America and abroad. He did undergraduate work at the University of Alabama, and later obtained a master’s degree there as well. One of his main interests during that time was the seasonal behavior of hunting and tool-making. Kirkland also has a master’s degree in Classical Studies from the University of Birmingham, and he worked on an archaeological project in the Old Kingdom. His many interests include field method and theory, high-altitude human-gatherer adaptations, and man’s entry into the Americas as a complete cultural complex. Kirkland currently works as an archaeologist on the seasonal team for the Valles Caldera National Preserve in New Mexico, doing intensive surveys and site documentation in the 2004 season. He also works as a volunteer archaeologist for various non-profit organizations, gaining new tools and a deeper understanding of the formation of historic architecture in the Jemez mountains. He does extensive research in the early lithic technologies through site study and replication work. He has worked many sites throughout the western United States pursuing this interest. Archaeological theory has always been his focus, and he seeks to enrich our understanding of the adaptive behavior of hunting peoples who face new challenges when entering new territories.
Kennemew Man Still in Legal Limbo

continued from page 1

Supreme Court. In reporting this development, Danny Westneat of the Seattle Times wrote that "an epic struggle between science and religion" had come to an end. Bob Roy Smith, an attorney representing the Colville Tribe, knew better. He told the Tri-City Herald that the meaning of the remains remains not "Native American" does not mean that they are not Indian and not of significant cultural importance."

Susan Shillinglaw, writing for Indian Country Today, de-
cided that the scientists and reporters who celebrated "their victory of science over religion" were "blunting the graves of missing Native Americans." She opined that the scientists who were "dicing their beads and sharpening their knives and scrap-
ers, poised to exercise their duty of white privilege, "needed to be restrained from committing excessively destructive staligraphy on the bones of Kennemew Man. Furthermore, Congress should "clarify the repatriation laws so that even judges and scientists" are under-
sensed them." Her's passionate if interrogative rhetoric colorfully summarizes the two-pronged strategy some Native Americans have adopted to circumvent the court decisions or at least to minimize its effects.

Delving tactics to keep scientists from studying Kennemew Man
On July 23, Paula Barran and Alan Schneider, the attorneys for the scientists (or plaintiffs), asked the court to reduce the participants in the case to the scientists and the government defendants. Since the Ninth Circuit Court had held that "NAACP has no application to the Kennemew Man remains," Barran and Schneider argued that tribal claimants and other nongovernment participants in the case no longer had a role in the proceedings. The only issues remaining to be resolved were "the plaintiffs' petition for attorney fees" and issues related to the negotiations between the scientists and the U.S. Army Corps of Engineers regarding the scientists' study plan. The request was made to streamline the process and to reduce the costs when documents are filed in the case.

The claimant tribes, now referred to as the "defendant-interven-
ors," objected to their potential exclusion from the ongoing negotiations, and on August 2 they submitted their objections to the court. Their attorneys warned that the "Tribes have a continu-
ing legal interest...that precludes dismissal and requires the tribes' continued participation in this case as intervenors." They also argued that the tribes have a "very direct and immediate stake under the American Indian Religious Freedom Act (AIRFA), the Archaeological Resources Protection Act (ARPA), the National Historic Preservation Act (NHPA), and the Administrative Procedures Act (APA). Their claimed interests included protecting the remains from "invasive and destructive studies" and protecting the "burial site from further excavations."

The Tribes, however, argued that the "sanctity of the spirit of the deceased" and that destructive activity violates the remains of "Native American" and the bodies of the deceased and that destructive activity violates the remains of "Native American" and the bodies of the deceased. The Tribes contended that the plaintiffs' dismissal would violate the "burial site from further excavations."

The Tribes also claimed that the additional studies requested by the plaintiffs might eventually prove that Kennemew Man is "Native American," and so bring these ancient remains under NAACP. This last point is a puzzling argument for the Tribes to advance. The acknowledgment that additional studies might show that Kennemew Man is a "Native American," for the purposes of NAACP, is a tacit argument for undertaking those studies, while the acceptance that Kennemew Man's remains have not been demonstrated to be "Native American" calls into question the basis for the tribes' claim that they have any right to contest those studies.

Barran and Schneider responded by pointing out that the Tribes originally were "allowed to intervene only for a single limited purpose that has now expired" and that they were now improperly seeking to "convert that limited intervention into one that is unlimited in scope and duration. They claimed the Tribes had not suffered any demonstrable injury; so, in legal terms, they..."
would not have standing. Any concerns the Tribes might have for the so-called "burial site" were unwarrented because the scientists had not indicated that they intended to conduct studies there. Furthermore, the Army Corps' injunction to Chatters not to disturb any "Indian grave" was irrelevant since "there is no evidence that Kennewick Man was Indian." They noted that what every consultation requires ARPA might errant the Tribes, "consultation does not carry with it a right to intervene as a party in the conduct of this legislation." Finally, Barron and Schneider stated that the plaintiffs have two court orders "authorizing them to study the skeleton... These orders are final, and the Tribes have no right to relitigate or interfere with their enforce ment."

Magistrate Judge Jester issued his ruling on August 17. He wrote that the scientists' motion to dismiss the various intervene parties was unnecessary. The Ninth Circuit's decision already preceded further intervention in the case by the Tribes or the other intervenors, so the scientists' motion was moot. "Following the Ninth Circuit's conclusion that NAGPRA does not apply, there is no basis for concluding that the Tribe's claims have a locally cognizable interest which entitles them to participate as parties in any further proceedings in this court." That regard fairly and definitively, but Rob Roy Smith told a reporter from The Oregonian that, "the court hasn't heard the last from us." Less than a month later, Smith, on behalf of the Colville, Nez Perce, Umatilla, and Yakama tribes, submitted a new motion for intervention.

The Tribes sought "to intervene on the two limited issues" mentioned in their opposition to dismiss; the scope of the studies of the remains and "the appropriate remedy, if any," concerning the Court's finding that the Army Corps of Engineers violated the NEPA... by rehabilitating the discovery site." In their memorandum in support of this new motion for intervention, Thomas Schlueer and Rob Roy Smith stated that they regard the "removal of the human remains with the Tribes once the permitted studies are concluded." They asserted the "burial site" and the human remains were "object of great religious and cultural importance to the Tribes" and that the remains should be given to the Tribes at the conclusion of the permitted studies "pursuant to AHPA and its regulations." They claimed the "record in this case conclusively establishes the Tribes' spiritual, cultural, and property interest in the remains" and argued that the proposed "handling, erosion, destructive sampling, and invasive examination" proposed by the scientists might cause "irreparable injury to those interests."

In support of those assertions, Arman Minthorn, a member of the Confederated Tribes of the Umatilla Indian Reservation (CTUIR), Chair of the Cultural Resource Commission of the CTUIR, and a "traditional religious leader" of the Umatilla, offered a declaration in support of the Tribes' motion for intervention. Minthorn asserted that "Indian ancestral remains are sacred" and Kennewick Man is an Indian ancestor. "We know this to be the case from our oral traditions and our beliefs." Minthorn made no attempt to refute, or even address, the court's conclusion that the oral traditions offered in support of this claim were not "adequate to show the required significant relationship." Minthorn argued that the possibility that some scientist might learn something from the bones that might lead to a measure of "academic fame" must be balanced against "respect for the dead and respect for the Tribes' religious beliefs." Barron and Schneider characterized the Tribes' motion to intervene as "an improper attack on the court's August 14 ruling that the Tribes have no right to participate further in this litigation, and is largely repetitive of arguments already considered and rejected by the court." They repeated their argument that the Tribes have no standing and denounced this new motion as "frivolous" and a form of harassment. For this reason, they asked the court to require that the Tribes pay the expenses they incurred in responding to the duplicitous litigation.

Schlueer and Smith described this maneuver as "retalatory scare tactics." They reiterated their assertion that "the weight of the evidence" established the Tribes' "relationship with these remains." That, as with Minthorn's statement, Schlueer and Smith made no attempt to show why the court was wrong in finding that the record contained "no evidence... to support the evidence" that "Kennewick Man and modern tribes share significant geneic or cultural features." They claimed the "Tribes' interests are real and locally protectable under AHPA and NEPA" and cited a previous court decision holding that "tribal members have standing to assert particular individuals' interests in the preservation of historical, archaeological, and cultural artifacts that are threatened with destruction." That use of this decision in support of their claim is ironic in that the Tribes have expressed their intent to reburial the remains of Kennewick Man which ultimately will lead to the degradation and destruction of the bones. It is the scientists who wish to preserve the skeleton so it can be studied, but Schlueer and Smith uncharacteristically characterized this as "scientific exploitation of early Americans."

Lobbying Congress to revise NAGPRA

On July 14, the Senate Committee on Indian Affairs met to review the implementation of AHPA. During this hearing, Paul Bender, a law professor at Arizona State University, and Walter Echo-Hawk, attorney for the Native American Rights Fund, offered testimony regarding what Echo-Hawk referred to as "important follow-up laws." Including NAGPRA.

Bender asserted that the Ninth Circuit's decision was "plainly incorrect as a matter of statutory interpretation" and frustrated NAGPRA's "important human rights objectives." Specifically, Bender argued that "NAGPRA was intended by Congress to apply to indigenous remains even when no relationship with a present-day Indian tribe has been established." He offered "corrective amendments" that would reverse the Ninth Circuit's "serious mistake."

He recommended that the words "that in be removed from NAGPRA's definition of 'Native American' or otherwise, that the phrase "or" was instead following the words that "to make it clear that a relationship to contemporary American Indian tribes was not required for prehistoric remains to qualify as 'Native American' under the terms of NAGPRA. He also suggested alternative measures that would achieve the same purpose and offered his assistance to the Committee's staff to "considering these and other proposals" to ensure that NAGPRA "be able to continue its vital human rights objectives."

Echo-Hawk, agreed with Bender that the Ninth Circuit Court failed to "give due consideration to the human rights issues NAGPRA was supposed to address and that to decide in the Kennewick Man case was an example of "judicial law-making." Echo-Hawk endorsed Bender's recommendations for amending NAGPRA and made the further suggestion that the responsibility for implementing NAGPRA be taken away from the National Park

continued on page 20
Assault on Gault

TAMU Anthropology Department is researching the Clovis culture at the famous Gault site

The first of a two-part story

Four professors and a team of serious graduate students plan to publish their intensive research into the Clovis horizons at the Gault site in east-central Texas. The publication will be a rigorous investigation of every conceivable topic of interest to scientists—from micromorphology, stratigraphy, and site formation processes to lithic materials, spatial patterning of artifacts, and Clovis bifacial tools and expedient tools. Even the debitage accumulated over generations of Clovis knappers, which accounts for the bulk of nearly 100,000 artifacts collected by TAMU investigators since 1998, earns a chapter in The Gault Clovis Site: Excavations of the Lindsey Pit.

This is an ambitious project, directed by professors Mike Waters and Rob Bonnichsen and Professor Emerita Harry Shafer and crewed by master’s and doctoral students, and it marks a new direction in graduate studies at the TAMU Anthropology Department. “Too much information is tied up and lost in theses and dissertations,” says Dr. Waters. Now students are encouraged to write publishable papers or stand-alone studies. Excerpts can become book chapters or journal articles, which guarantees that hard-won information will be disseminated and put to use. This is the model used by the Earth Sciences departments in most universities. The Gault site monograph is the pilot program at TAMU, and according to Waters, the model will shape every thesis and dissertation.

Homage richly deserved and long overdue

The history of the Gault site is a sad record of abuse and pillaging that dates back to 1929, when archaeologist James E. Pearce learned of the Gault family farms and investigated its twin attractions, an immense outcropping of high-quality Edwards chert and an enormous midden containing material and artifacts cast off by untold generations of hunting-gatherers, who were drawn to the site by the chert and by the sumptuous surroundings. The Gault site sits astride an ecotone, where the Edwards Plateau gives way to low grasslands, it’s a hard to imagine a finer setting for a campsites. Buttermilk Creek was a year-round supply of water; hardwood trees provided shade, firewood, and edible nuts; lush Black Prairie grass gave occupants building material and attracted game animals aplenty.

For thousands of years this little Eden had been a haven for historic and prehistoric natives. Unfortunately, when word of it spread, it attracted a horde of pot hunters, avocational archaeologists, and amateur flintknappers. Stories abound of Edwards chert carted off from the site by the pickup-truck load. Amateur knappers had been camping at Gault for years when doctoral candidate Bill Dickens became acquainted with the site. He remembers one fellow who lived on the site in a house trailer for seven months, another stayed six or seven over weekends at a time, and another until he couldn’t stand the upkeep. Both men spent their time spilling chert and marking points for sale. In the process, they and freebooters like them not only destroyed nearly all usable chert, they littered the site with their debris. “That doesn’t make my job any easier,” Dickens laments.
Tentative chapters.  

The Gault Clovis Site: Excavations at the Lindsey Pit

Edited by Mike Waters, Harry Shaffer, and Rob Bonnichsen

1 Introduction and background information Waters, Shaffer, and Bonnichsen

2 Stratigraphy and dating of the site Waters and Donald Alexander

3 Site formation processes (left and orientation data) Alexander

4 Site micromorphology Heidi Luchinger

5 Lithic raw material of the Gault site Bill Dickens

6 Clovis bifacial technology Dickens

7 Clovis blade technology Dickens

8 Clovis endscrapers Jim Wiederhold

9 Use-wear analysis of blades Scott Minshak

10 Use-wear analysis of bifaces Ashley Smallwood

11 Debitage Charlotte Penny

12 Clovis expedient tools Penny

13 Spatial gathering at the site Penny

14 Anthro artifacts Dickens and Penny

15 Faunal analysis Jason Wieczorek and Eric Bartellin

16 Summary and conclusions Waters, Shaffer, Bonnichsen, and David Colson

(As accomplished knapper himself, his chapters in The Gault Clovis Site focus on lithic raw material and Clovis bifaces and blades technology.)

Activity at the site fell off in the late 1980s, when the sudden petrification of the site was precipitated by the discovery of a buried spring. In 1990 a new flurry of interest was evidenced when an amateur collector named David Olstad dug deeper and found Clovis artifacts. Tests by Michael Collins and Thomas Hunter of the Texas Archeological Research Laboratory (TARL) of the University of Texas at Austin verified Clovis provenance; nonetheless, the landowner continued to admit anyone willing to pay for the privilege of digging. Waters recalls, "When I first saw the site [about 1995] it was a pay dig, where you paid 25 dollars a day and you could go there and dig all day and keep whatever you found."

The precious Clovis layers—there are two, a layer of pond clay that overlies an overbank deposit from Buttermilk Creek (B)—were saved from oblivion when the land was bought by Rick and Char Penny, the team specialist on debitage and expedient tools, confers with Mike Waters.

Howard Lindsay. The brothers are amateur archaeologists, but not planners. Aware that they owned a site of incalculable scientific value, they closed it to public and granted Dr. Collins and Hunter rights for a 3-year excavation project. Waters and Shaffer were invited to join as co-principal investigators, and TARL archaeologists conducted two field schools at the site of the Lindsey Pit.

Shaffer, a longtime Texas archaeologist, and Waters shared responsibility for directing the TAMU field school in 2000; David Colson conducted additional research in 2001. Waters considers TAMU teams especially fortunate because their area, of excavation with each 1 by 1 (about 10% sq ft), lay in one of the richest parts of the site with the greatest concentration of artifacts and with the clearest separation between the Clovis components. It becomes obvious from the profusion of artifacts that this was no typical Clovis campsite; visited a time or two by wondering hunters or tool-makers in search of flint. "What we have here, at Gault," says Waters, "is two stratigraphically separated Clovis occupations—something unheard of and unprecedented in Paleoindian archaeology." Shaffer, equally emphatic about the importance of Gault, calls it "the most integratively occupied Clovis site currently known in North America."

Making sense of stone tools

It's not surprising, considering the sheer number of tools recovered, that the bulk of the research and most of the papers of The Gault Clovis Site are dedicated to intensive scrutiny of Clovis bifaces and blades. Ashley Smallwood's detailed use-wear analysis on more than 60 bifaces, including 4 Clovis points, most of the bifaces are in early stages of manufacture, "and of crude pieces," she describes them. "Some have internal flaws, or maybe there was a manufacturing flaw—but one of those oversized [more fossil flake that extend across the cored face, of Clovis halftone] didn't go just the way the Paleoindian wanted it to—so they were left in this very early stage." The majority of the early-stage bifaces are thicker pieces that may have been used secondhand as choppers or adzes for everyday activities in camp.
The use-wear analysis of Smallwood is doing is expanding our understanding of the lifestyle of Clovis people. The stereotypical image of the mighty Clovis hunter who dined exclusively on mammoth steaks and chops has been shattered, for the picture that is emerging is that Clovis, like every other known primitive society, was a hunter-gatherer culture. The tools they made could have been used for such mundane purposes as cutting grass, working wood, and skinning game. A major goal of Smallwood's research is to determine the diverse uses of bifaces by examining cross-cutting linear indicators—scratches that result from human cutting, chopping, or seeing motions—and polish and rounding in different places on a tool, perhaps where we wouldn't expect to find such wear. She even hopes to discover the life-use history of many tools.

Smallwood, who participated in digging at Gault in 2001 as an undergraduate, is now in the doctoral program at TAMU. At 24, she is the youngest of her peers. Paradoxically, she suspects that her work on the Gault collection may not be giving her a picture representative of Clovis-wide technology, since Gault knappers, with an unlimited supply of high-quality chert at hand, had little incentive to be frugal with toolstone. "A lot of this stuff could just have been brushed aside if there was a flaw," she notes. For her dissertation she is considering comparing Gault tools with an assemblage from another Clovis site that lacked abundant high-quality toolstone, and where knappers consequently may have been compelled to salvage damaged pieces and to work with flawed lithic material.

Scott Minchak, in the master's program at TAMU, is studying Clovis blades. Some of the tools he's analyzing are prismatic blades; others are bladelet tools, products of early stages in blade production. Regardless of the type, nearly all are made of native Edwards chert, either from

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Ashley Smallwood at the Gault site, summer 2001.

blanks quarried from the local outcropping or from cobbles collected in Balcony Creek. (One specimen being analyzed may be quartzite.) He has organized blades into three categories. Those he calls primary blades have a significant amount of cortex (the rim that appears on weathered chert); secondary blades might have cortex on one face; interior blades have little or no cortex. Use-wear analysis is the name of Minchak's game. Having done intense study of wear patterns on Gault blades under a stereomicroscope, much of his research is now devoted to experiments that duplicate the polish and scratches found on Gault tools. Using blades crafted by Bill Dickens, the team's knap-to-order expert, to cut meat, grass, wood, and bone, he studies the surfaces under a scope to see if he can find a match with tools from Gault. Since tools come from both Clovis layers at Gault, he is also looking for generalized characteristics, whether tools from one layer had a longer use life than those from the other, for example, or whether tools from one layer were used to cut more hard or soft material than those from the other.

Not all marks are the result of tool use. Since the sediments at Gault had lain largely undisturbed until the TAMU team dug them, many of the scars found on debitage and tools may have been caused by Paleolithic foot traffic. How do you gauge the effect of trampling? You can do what Minchak did (an experiment suggested by colleague Char Boyer), sawn flat tools on the ground and ask your friends to walk on them, then go back for another bout at the scope. Resourcefulness is a quality shared by all the members of the TAMU team. End of Part 1

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What happens to the edge of a chert blade when you cut cane with it? Scott Minchak uses the practical method to find out.
Kennewick Man Still in Legal Limbo

Service (NPS) and "moved to a neutral agency with the Executive Branch." The justification for this move was that the archaeologists employed by the NPS were biased against the interests of Native Americans.

While NAGPRA certainly was conceived to address human rights concerns related to the ability of federally recognized tribes to reclaim, from federally funded institutions, human remains and certain artifacts related to those tribes, neither Bender nor Echo-Hawk was explicit about just how scientific efforts to study a 9,000-year-old human skeleton with "no recognizable link" to any modern Indian tribe constituted a "human rights" issue.

On 31 July, the Confederated Tribes of the Umatilla Indian Reservation issued a press release stating that the courts had "failed NAGPRA, and the tribes as well." The statement expressed the tribes' intent to work "to strengthen the law" so that discoveries such as Kennewick Man "will be protected." They also expressed their commitment "to try to protect the Ancient One as best we can from repetitive destructive testing."

The Native American Technical Corrections Act of 2004

On September 23, Senator Ben Nighthorse Campbell introduced a bill "to make technical corrections to laws relating to Native Americans," including NAGPRA. In the last two lines of a 4-page bill, Campbell proposed inserting "or was" after "in" in "Section 7(a) of Public Law 103-301 (U.S.C. 2001 (g))." This "technical correction" is precisely what Bender and Echo-Hawk had called for in their appeal to the Senate's Indian Affairs Committee. But Senator Campbell was proposing making this sweeping change with no hearings or discussions with other stakeholders.

Moreover, the wording of his bill appeared to be intentionally confusing because the law's committee name, "NAGPRA," was not mentioned. Adding insult to injury, a Senate staff member, quoted in a story on Indianz.com, suggested the bill was "not controversial." The subsequent response to Campbell's proposal suggests this unnamed member of the Senate staff was either hopelessly de
toxicated or deliberately disingenuous.

An editorial in the Rocky Mountain News of October 13 concluded, "So-called has a legitimate interest in furthering scientific research on the prehistory of America, and such research harms no one alive or alive within living memory. Campbell's attempt to revise current law is a misguided attack on such research, and it must be defeated."

On October 15, the Arizona Republic declared that the Ninth Circuit Court's ruling "gives knowledge a chance." NAGPRA was intended to honor the spiritual beliefs of American Indian tribes, but "historo no one if such beliefs are generalized and extended too far into prehistory that information about the origins of the human race goes unexamined." (For more about Senator Campbell's amendment to NAGPRA, see Ryan Setzler's article in this issue, "What Is the Significance of It?")

Now what?

Magistrate Judge Feldker has not yet ruled on the Tribes' latest motion to intervene, but given his previous rulings, the Tribes cannot have high hopes that he will rule in their favor. They are, however, succeeding in their effort to delay the implementation of the court-ordered scientific study of the remains of Kennewick Man. The Senate has not yet voted on S. 2843, New Perspectives on the First Americans

Bradley T. Lepper and Robin Rennebohm, editors

New Perspectives is a collection of concise, 2000-word papers presented in a manner unique in First American studies, a field that currently lacks a controlling paradigm. Papers in this volume, written by major players in their fields, explore diverse frontiers of knowledge: pre-Clovis archaeology (four papers); Clovis-era archaeology (ten papers); Paleoeleumpe paleoanthropology (four papers); new approaches to the study of Paleoamericans (six papers); Paleoamerican and public policy (four papers); and a paper on new directions for Paleoamerican archology. Each paper stands on its own merits. Collectively, they survey the breadth of intellectual ferment in a field seeking to reconcile itself with changing scientific developments in an evolving social and political context.

From CSFA

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Campbell's "Native American Technical Corrections Act of 2004," if the bill is passed, it is not clear whether or not it can retroactively apply to Kennewick Man. Whenever it does or does not, however, the shifting legal landscape undeniably will result in more motions and more delays. Kennewick Man may be destined to reside in legal limbo for years to come. Does such a late-serve anyone's interests?

For the most current information on the Kennewick Man court case, see the Friends of America's Past Web site www.friendspast.org

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The opinions expressed in this article are those of the author and do not necessarily reflect those of the Ohio Historical Society, with whom he is employed as a Curator of Archaeology.