

THE MOKI MESSENGER

NEWSLETTER OF THE SAN JUAN BASIN ARCHAEOLOGICAL SOCIETY

Chapter of Colorado Archaeological Society



OCTOBER 2008

The next meeting of the San Juan Basin Archaeological Society (SJBAS), our chapter of the Colorado Archaeological Society, will be on Thursday, October 9th, and will commence at 7:00 PM. As usual, the meeting will be held in the Fort Lewis College's Center of Southwest Studies, in the Lyceum. A highlight of the gathering will be a talk by historian Duane Smith, "A Tale of Three Towns". This topic concerns the rivalry between Cortez, Mancos and Durango as to which community should be considered the gateway to Mesa Verde National Park and its famous array of Anasazi cliff dwellings. Dr Smith's lecture will be a feature of the Durango Heritage Celebration.

We have two chapter outings scheduled for this month, the first of which will be a visit to archaeological sites in the Galisteo Basin-Santa Fe area on Sunday, October 12th, through Wednesday, October 15th. The leaders of this four-day excursion will be Richard and Linda Robinson, who have provided the following information about the proposed field trip.

Galisteo Basin Field Trip

We will stay at the Comfort Inn at 4312 Cerrillos Road on the south side of Santa Fe. Reservations are being made under Richard Robinson's name at a rate of \$59.99 plus tax, but secured at check in and paid with your credit card.

During our stay we will visit three sites that were occupied during the same time period and look for both similarities and differences in these settlements. A number of sites will be visited including Arroyo Hondo Pueblo, Pueblo Bonito, Petroglyph Hill and the SAR museum where we will view objects obtained from Arroyo Hondo Pueblo. Other arrangements are still being worked out and cannot be finalized until Oct 1.

The Galisteo Basin is the location of 13 or more large PIII and PIV sites occupied from AD 1275 to 1550, and was a major area of inhabitation at that time. One prominent language, Tano (Southern Tewa), was spoken in the area, and some Keres. Each site produced it's own ceramics but the area's ceramics have a wide distribution.

Regular cars will be sufficient with paved roads near the sites. We will have volunteer guides at the above-mentioned three sites such that gratuities would be appropriate.

Bring a hat, sunglasses, sunscreen, water, long pants, hiking footwear, and clothing appropriate for the prevailing conditions (possible wind and showers). We will want sack lunches for two days but the details are still being worked out. None of the hikes presently scheduled are either long or hard. We are looking to add one additional site which would be between 1 and 2 miles round trip with only 20 feet being of moderate difficulty.

Call Richard Robinson at 970-259-1943 or email robinson@frontier.net for more details.

Our chapter's second trip of this month will be on the last weekend of October; details concerning this Fall outing are listed below.

Monument Valley Trip

Linda Robinson and Gail Schulz are leading the trip to Monument Valley on Saturday October 25, 2008 through Monday October 27. This trip is full as of September 2, 2008. All participants, other than those camping at Gouldings, should have already guaranteed their rooms at Gouldings Lodge and confirmed they will be going on the Sunday tour of Monument and Mystery Valleys. If you signed up for this trip and have not confirmed these arrangements, please call Linda at 259-1943 right away. Rooms are \$124.00 per night which includes tax. The tour is \$74.00 per person which includes tax and tip. The tour will be charged on your room bill or pay separately if you are camping.

We will meet at Santa Rita Park in Durango on Saturday the 25th at 8:30 AM to caravan to Bluff UT. We will eat lunch at the Twin Rocks Café in Bluff about 11:30 AM to noon. We will then drive through Valley of the Gods to view this spectacular landscape. We may drive to the Goosenecks of the San Juan overlook and/or Muley Point overlook depending on time and desires of the group. We will proceed to Gouldings Lodge near Monument Valley and will check into our rooms. We can visit the museum and store, see the movie and relax before dinner at the lodge. Sunday the 26th we will have an all day guided tour of Monument and Mystery Valley. A barbecued hamburger lunch is included. A vegetarian option is available with 24 hours notice to the lodge. Dinner will be at the lodge. Monday Oct 27 we will return home. We will stop in Bluff to visit the fine pioneer park and buildings assembled there. Linda Robinson 259-1943, Gail Schulz 259-3249

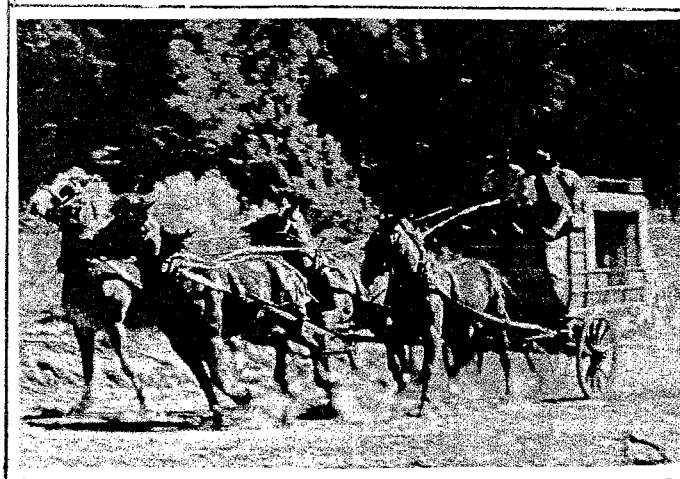
Goulding Trading Post

The old trading post no longer functions as such. However, it has been fully restored, depicting how the Gouldings lived when their home served as the trading post. Downstairs is the old store that is a replica of the original trading post. The upstairs contains the living quarters and a museum about the history of the Goulding family with displays of Native American artifacts from the area and memorabilia of the Gouldings. There is also a room dedicated to the movies that have been made in Monument Valley, the first of which was the classic *Stagecoach* in 1939 starring John Wayne. In addition to the rustic old trading post, there is a modern motel, restaurant, and an outstanding Indian arts and crafts store; all located in a remarkably beautiful setting of tall buttes and mesas.

The original post was started by Harry Goulding in a tent in 1923. Monument Valley contained a portion of the Paiute Reservation known as the Paiute Strip and the State of Utah offered to trade the Paiute tribe more fertile land to the north for land in Monument Valley, which they accepted. Shortly after, the Gouldings laid claim to 640 acres of the state owned land at the base of Tsay-Kissi-Mesa (Big Rock Door Mesa) at a cost of \$320, set up their tents and a makeshift counter, and began trading. Goulding built the two-story stone building, currently housing the museum, and moved into it in 1928. He sold the property to Knox College of Illinois in 1963. They in turn sold it to Gerold and Roland LaFonte, the current owners, in 1981. The trading post was designated a State Historical Site in 1989.

(from Richard Berkholz: Old Trading Posts of the Four Corners)

Our chapter's mid-September investigation of the late 18th Century road and transportation system in our corner of Colorado was an interesting and informative way to spend a weekend. On Saturday, September 13th, Richard Robinson took a number of our people on a hiking tour of a portion of the long-abandoned Animas Canyon toll road, the route used from 1876 to 1882 by miners and other travelers who wintered in the Bakers Bridge area and prospected for minerals in Bakers Park and the upper Animas Valley during the warmer months. Rich has made an in-depth study of the remains of this thoroughfare, and gave our group an excellent account of its significance and impact upon the development of our region. On the following day the group learned more about the nature of early-day transportation by visiting Bartel's Mancos Valley Stage Line, an establishment with a magnificent collection of stage coaches, wagons and other horse-drawn vehicles that were the primary mode of transportation in the mining country of the late 1800's. A high point of this visit was the opportunity to take a one-hour stagecoach ride over the same type of dirt roads used in former times — a truly bumpy and exciting experience! This second event of the busy weekend was organized by Rhonda Raffo, and we wish to thank Rhonda and Rich for their efforts to give us a better understanding of the difficulty of reaching and developing the mineral resources of this mountainous part of our state.



N.M. BLM looks to oil and gas to fund archaeology

— By Susan Montoya Bryan —
The Associated Press

ALBUQUERQUE— Oil and gas developers could end up playing a big role in an effort by federal and state archaeologists to better understand the history of early human life among the sand dunes and grasslands of southeastern New Mexico.

The Bureau of Land Management announced Tuesday that it has signed an agreement with the New Mexico Historic Preservation Division and the federal Advisory Council on Historic Preservation that will give oil and gas developers an option of funding excavation work and other studies rather than paying for archaeological surveys when they propose new development.

"We're excited about it. It's definitely outside the box in terms of how one normally takes into account the effects of oil and gas

development on archaeological sites," said Stephen Fosberg, state archaeologist for the BLM.

Fosberg has been working for years on the agreement, which covers more than 1 million acres in New Mexico's southeast corner — a hotbed for oil and gas development.

Much of the area has been surveyed over the years. In fact, nearly 12,000 surveys were done and officials are confident that more than 70 percent of the cultural sites in the area are recorded.

Fosberg said the agency has been very good at documenting these sites and avoiding them during oil and gas development. However, not much is known about the sites themselves, making it difficult for the agency to manage them accordingly.

"We haven't excavated hardly anything so we have a very poor handle on what

kind of data they contain, what kind of information we can learn from them, what they're telling us about human adaptation to the desert in that part of the trans-Pecos area," he said.

Aside from learning about the early people of the region, Lisa Meyer of the New Mexico Historic Preservation Division said excavation also could give archaeologists a better understanding of how the environment can change sites over time.

For example, a survey might turn up a few artifacts on a sand dune, leading archaeologists to believe it might have been a stopover for hunters and gatherers. But, Meyer said, only excavation can determine whether there's more beneath the surface.

"This is an opportunity to actually test some of our assumptions about how sites are created, the

processes behind them, how they're buried and how they're exposed again," she said. "We need to find better ways to interpret these sites on a survey level and the only way to do that is to actually do some excavation work."

Still, archaeology can damage the very resources it's designed to protect, said Jim Walker, director of the national nonprofit Archaeological Conservancy's Southwest region.

"An archaeological site is a set of clues and we'll never have those clues again in the same order. An archaeologist destroys an archaeological site as he or she excavates," Walker said. "And we also know that archaeology is a changing science and we're always coming up with new ideas and new techniques and the only way we can test a new idea or new technique is on an unexcavated archaeological site."

The Daily Times

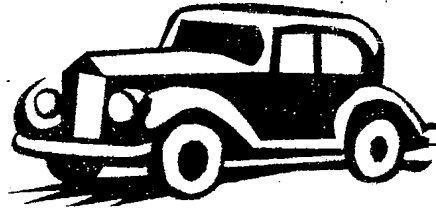
We hope to have a good turnout for the meeting announced as follows — and, if you wish to know who are committee members, the group consists of all SJBAS people who participate in, enjoy, and learn from our excursions to archaeological and historical sites! One suggestion: if you intend to lead or help arrange one of our forthcoming trips, do look carefully at your calendar and plan to avoid dates conflicts with those of our chapter meetings, important conferences such as the Pecos affair, and the annual meetings of the Colorado and New Mexico Archaeological Societies. And Saturday, Sunday, or weekend outings are preferable, as we do have members who work Mondays through Fridays!

THE 2009 FIELD TRIP COMMITTEE MEETING

At the ROBINSON'S HOUSE
(Linda and Richard-phone-259-1943 rsvp please)

6:30 PM OCTOBER 30, 2008

Directions:



Head north of Durango, on US 550 (please watch for elk and deer on the roadway) towards Silverton for about 16 miles and make a right turn onto CR 200, the exit has been moved and is now about 100 yds closer to Durango (if you get to the Tamarron entrance you have gone one mile too far N.), then head East towards the Village at Rockwood. You will be descending a curvy-snake like road for about a mile, passing a turn off to Rockwood Estates, and the D&SNGRR station, to Hogan Circle, at the circle turn left to 615 Hogan Circle a multi-level brown house immediately past, and on the same side of the road as the mail boxes.



Please come to the SJBAS 2009 Field Trip Committee meeting at 6:30 with ideas for trips, trips that you will lead, and ideas for trip leaders (they can't defend them-selves, if they are not present).

In the end, we will be able to prepare a field trip guide for 2009!



The next series of classes in the Program for Vocational Archaeological Certification (PAAC) that is to be given in our corner of Colorado will be held in Cortez on the weekend of October 11th and 12th. This PAAC module will be the important "Archaeological Research Design and Report Writing" group of classes, and the instructor will be Colorado Assistant State Archaeologist Kevin Black. You can call Peggy Morris (970-382-8688), our chapter's PAAC Coordinator, for further information concerning these classes and about registration. And, if you're new to our chapter and don't know

what this PAAC thing is all about, Peggy can provide information regarding this splendid way to learn about archaeological matters and techniques with a minimum of fuss, bother and expense.



"Look, life is nasty, brutish, and short, but you knew that when you became a caveman."

THE NEW YORKER

Climate Change Leads to Agriculture

Evidence from southwestern Mexico links regional climate and environmental changes to the development of agriculture in the Americas; according to Dolores Piperno, curator of archaeobotany and South American archaeology at the Smithsonian's National Museum of Natural History. In a report published in the *Proceedings of the National Academy of Sciences* online, Piperno and her international team of collaborators present paleoecological evidence from the Central Balsas Valley of Mexico concerning the influence of climate on agricultural development.

Studies of pollen, phytoliths, and charcoal samples recovered from the valley indicate that during the late glacial period (12000–8000 B.C.), the cold, arid climate resulted in dry lake beds. Beginning around 8000 B.C., as the weather became warmer and moister, lowland tropical forests ex-

panded, and lake beds filled with water. People were drawn to the lakes and adjacent fertile soils.

According to Piperno, "the changes in climate that were associated with the development of agriculture in the Balsas region were increases in temperature, probably by about four to five degrees Celsius, and increases in precipitation, probably by about 10 to 30 percent. There were also increases in the atmospheric concentration of carbon dioxide that would have increased plant productivity." These changes created new conditions that led to novel and ultimately successful adaptive strategies, including the cultivation and domestication of plants, Piperno said.

"Many staple foods that are still eaten around the world today, like maize, manioc, sweet potato, and other crops, originated in the tropical forest," she said. Among the plants that Smithsonian researchers found

evidence of were maize and squash, both of which have wild relatives growing in and near the Balsas Valley. Populations of modern teosinte from that region are genetically closest to maize and appear to be its direct wild ancestor.

"Maize was developed in the region through various kinds of artificial (human) selection pressure on genes present in wild maize that did things like make the seeds easier to harvest and eat and produce the cob of maize," said Piperno, who with Deborah M. Pearsall is co-author of the book *The Origins of Agriculture in the Lowland Neotropics*.

"The view that maize was domesticated in the Balsas Valley results from a great deal of very good molecular biology work comparing maize with wild varieties to see which of the wild varieties is genetically closest to maize," Piperno said.

—Steven McFadden

american archaeology

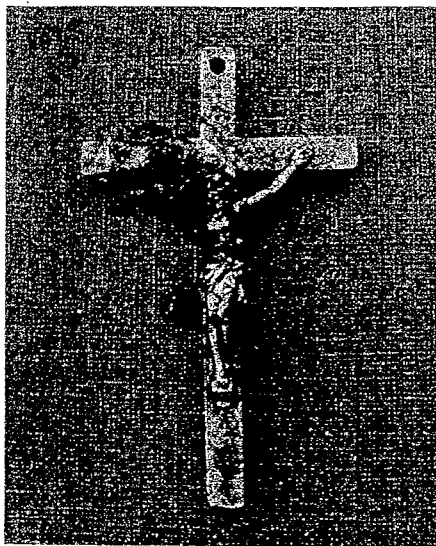
Excavation Reveals New Orleans' History

Archaeologists find evidence of oldest French Colonial structure.

Archaeologists have found what they believe to be the earliest structure from French Colonial New Orleans. The discovery was made during excavations in St. Anthony's Garden, located behind St. Louis Cathedral in New Orleans, the nation's oldest active cathedral.

"We uncovered a small hut made of posts and planks sunk directly into the ground that lays askew the current street alignment," said Shannon Lee Dawdy, a University of Chicago archaeologist who directed the excavation. The hut dates to New Orleans' frontier phase, sometime between 1717 and 1722. Native American pottery sherds and French ceramics, as well as the bottom of a wine bottle from the early 1700s, have been recovered adjacent to the hut. Many sherds resemble Creek and Choctaw pottery and suggest a significant Native American contribution to the building of the city that has gone unrecognized in the historical record.

The researchers have found



A silver crucifix recovered during the dig.



St. Anthony's Garden is located behind St. Louis Cathedral, the country's oldest active cathedral.

thousands of artifacts representing nearly 300 years of history at site. "One of the most remarkable artifacts recovered is the small silver crucifix with a Christ figure attached which we found in the area of Pere Antoine's hut and yard," said Dawdy. Pere Antoine was a Capuchin priest who wielded great influence over the French colony from the 1770s till the early American period of the 1820s. A fire destroyed most of the city in 1788, and the beloved priest allowed residents who had lost their homes to build temporary structures in the garden next to his small hut.

The existing cathedral is the third church built in this location. The first church was completed in 1727, and the second church, built after the 1788 fire, was dedicated on Christmas Eve, 1794. The present church was built by the

French-born architect Jacques N. B. de Pouilly in the mid-19th century, incorporating parts of the earlier structure.

The researchers have uncovered evidence that the site served as a kitchen garden maintained by the Capuchin fathers in the French Colonial era, and later hosted an ice cream stand and flower market during the antebellum period. By analyzing phytolith samples, which are mineralized remains of plant cells, the researchers hope to identify which species were being cultivated. This marks the first time this technology has been used to analyze samples from a North American urban garden site.

The investigation is part of the planning phase of a major restoration of the garden that was prompted by Hurricane Katrina's toppling numerous trees. —*Tamara Stewart*

— american archaeology —

The Utah Rock Art Research Association's 28th Annual Symposium will be held in Escalante, Utah, on October 10th through 13th. This weekend event will feature a broad range of exhibits and presentations concerning Utah rock art, particularly focusing on that of the Grand Staircase/Escalante National Monument and the Capitol Reef National Park. A number of trips to rock art sites are also planned. You may call David Sucec (801-359-6904) for further information about the symposium.

Fourteen-Thousand-Year-Old Coprolites Contain Human DNA

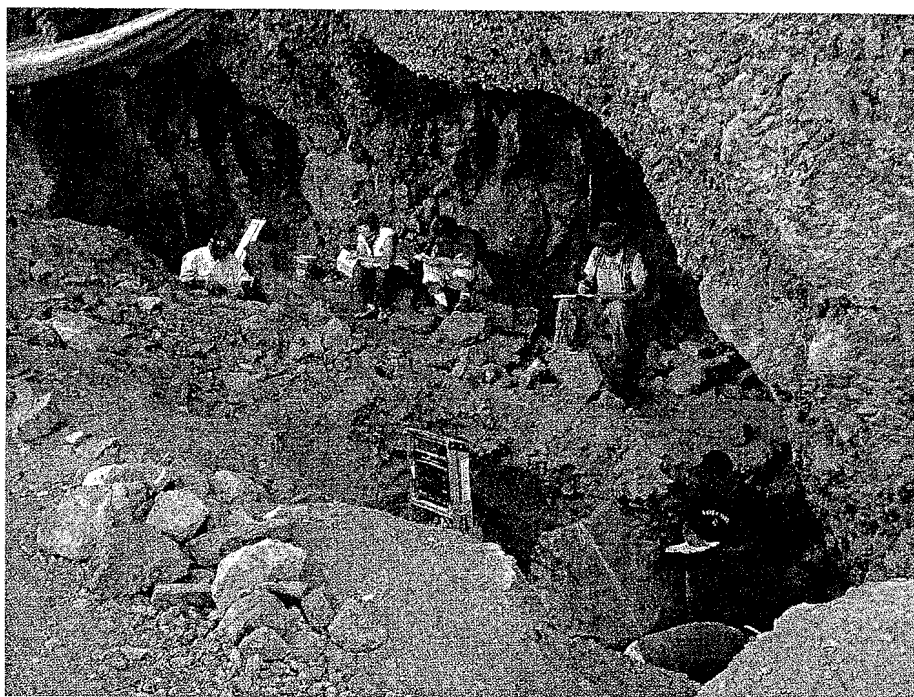
Discovery may be the oldest biological evidence of humans in the New World.

Human coprolites discovered during excavations at the Paisley 5 Mile Point Caves in south-central Oregon have been radiocarbon dated to 14,300 years ago, approximately 1,000 years before the Clovis people, the first generally accepted culture to inhabit the Americas, are believed to have entered the New World.

Of the 14 coprolites (dried feces) recovered, six have tested positive for ancient human DNA. "If our data are correct, people were present in Oregon before the Ice Free Corridor opened between interior Alaska and the lower 48 United States," said archaeologist Dennis Jenkins of the Museum of Natural and Cultural History at the University of Oregon in Eugene, one of the researchers who investigated the site. Rather than the traditional view that first Americans entered the New World via the Bering Strait, these new findings suggest it is more likely that people came down the coast by boat or that they were south of the corridor before the Last Glacial Maximum closed the route.

Additional analysis by the University of Sweden (Uppsala) and the Max Planck Institute in Leipzig, Germany, confirmed the six coprolites contained human DNA, and their genetic signatures match those of Native American groups. Three of the six also yielded canid DNA. The coprolites were also analyzed for protein residues, two of which tested positive for human proteins and produced fragments of human hairs.

"Thus, three entirely independent



Researchers record their findings at the Paisley 5 Mile Point Caves site.

forms of data indicate these are human coprolites or coprolites containing human remains," said Jenkins. "The preponderance of evidence supports the interpretation that people were at the caves 14,300 years ago."

But Gary Haynes, an archaeologist at the University of Nevada at Reno, expressed concerns about the possible contamination of the coprolites that contain human and canid DNA. "This suggests to me that at least some of the coprolites may not be human," he said. "It may never be possible to eliminate the possibility of contamination in such previously disturbed sediments." Haynes also said the radiocarbon dates may be in error due to carbon reservoir

effects, a condition whereby old carbon recirculates through the food chain, resulting in dates that may be hundreds or thousands of years too old.

He suggested that items extracted from the coprolites be dated separately to determine if they are contemporaneous with each other. "I'd also like to see documented proof that the hairs identified in the site as being human really are indisputably human, and that they occurred within the coprolite, not sticking to the surfaces," he said. Haynes and others have also questioned the dearth of artifacts found in the caves, which Jenkins attributes to low population and short occupation.

—Tamara Stewart

american archaeology

FLOUNDERING IN THE PAST

by MARK ROSE

“AN archaeologist? Do you go on digs?” “Actually I study fish bones.” My answer usually evokes either a blank look of disbelief or one of puzzlement. Clearly I am expected to say something like “Why yes, I just got back from Machu Picchu.” Even archaeological colleagues seem to expect something loftier than fish bones—for them “working on a corpus of Etruscan bronze vessels” or “investigating acculturation and ethnicity in colonial Bolivia,” would be a more suitable reply.

Potentially, fish bones can tell us much about ancient peoples, such as where, how, and when they fished, what they caught and how important fish were in their diet, and what the environment in which they lived was like. Why then do people look askance at fish bones? Perhaps it is easier for them to envision past cultures by studying stone tools, pottery, or sculpture. For whatever reason, fish bones have been neglected.

Except for a scatter of earlier reports, it is only within the past quarter century that archaeologists have really started looking at fish remains. Today, members of the Fish Remains Working Group of the International Council for Archaeozoology are striving to improve our understanding of this field. Participating in the development of this branch of archaeology is exciting because we get to ask basic questions about fish bones that archaeologists working with other material, like Etruscan bronze vessels, don't get to ask. Understanding how fish bones “behave” in the archaeological record is a good example. The bones we excavate represent only a fraction of the fish caught by the inhabitants of ancient sites. How the fish were processed, cooked, and disposed of determines what bones we recover and then study. Other factors include later human activity at the site and the excavation methods used.

Andrew Jones, of the Environmental Archaeology Unit at the University of



ILLUSTRATION BY PHILIP ANDERSON

York, has conducted research on fish bone behavior for the past several years. His work has included such experiments as “Walking the Cod,” and “Man Eats Herring.” In the former, Jones (approximate weight 167 pounds) placed a modern cod skeleton inside a bag and walked on it. After 25, 75, 175, and 375 steps he recorded how the bones fragmented. In addition to producing crunching noises, Jones demonstrated that not all fish bones are equally durable—which explains why some bones turn up at archaeological sites more often than others. In “Man Eats Herring”—one in a series of experiments in which fish were also fed to dogs, cats, pigs, and rats—Jones recorded what bones survived the chewing process and corrosive effects of the human digestive system. The breakage and deformation of herring bones chewed and digested by Jones himself proved to be similar to that found in herring bones from tenth-century latrine pits in York. How bones behave as they are fragmented or are consumed by people or scavenging animals is a vital matter if we are to accurately interpret archaeological fish bones.

This past September the Fish Remains Working Group met, for the fifth time, at Stora Korno, a small island off the Swedish coast near Lysekil. There some 30 specialists from Europe and North America pursued other questions that had never been asked before. Rebecca Nichol-

son, also from the University of York, gave an outstanding, detailed paper on “Burnt Fish Bones: What Value to Archaeology?” Using both open fires and controlled burning, she investigated fundamental questions such as how much bone survives burning at various temperatures and do bones of some species survive burning better than the same bones from different fish.

Not all the papers at Stora Korno dealt with questions of fish bone survival. Leif Jonsson of the Central Board of National Antiquities in Sweden, and host of the Stora Korno conference, presented “Violet is Nice,” a paper about staining modern skeletons with alizarin. Leif finds that stained fish bones

show, more clearly than unstained bones, variations in surface texture that can be useful in distinguishing fish species. Apart from its enhanced utility, the violet cod skeleton Leif brought for demonstration purposes was aesthetically appealing.

At least one of the fish specialists in the group doesn't work with bones at all. Medieval historian Richard Hoffmann of York University in Ontario is concerned with fish and fisheries. Currently he is researching the history of carp cultivation in western Europe. Carp were an important resource in the Middle Ages, but we don't know exactly when carp were introduced into western Europe or when cultivation methods spread throughout the continent. Hoffmann is scouring the archives of ancient families and the libraries of remote monasteries in pursuit of answers.

The research being done by this group is what good archaeology is all about—a combination of inventive thinking and persistent footwork. Surely there are other fields within archaeology that, like fish bones, have been neglected for no legitimate reason. Yet if we don't explore these areas but stay with more familiar subjects, our view of the past will be incomplete—merely a reflection of our own academic traditions and cultural tastes. Another article on the Parthenon frieze? Another book on Precolumbian goldwork? I'll take the fish, thank you. ■

ARCHAEOLOGY

Project Works To Protect Pueblo Blanco

BY RAAM WONG

Journal Northern Bureau

GALISTEO BASIN — Buried in a sandbar a mile downstream from an old pueblo rests garbage left by the American Indians who once called this wind-swept swath of high desert home.

The broken pots, animal bones, charcoal and other odds and ends lie on top of one another like fallen dominoes.

Archaeologists say the layering of the material suggests it was washed there during a major, even catastrophic, flood.

Flooding, erosion and climate change may have been primary factors in Pueblo Blanco's abandonment in the 1600s.

"The whole pattern of evidence (suggests) they were trying to cope with erosion and drought simultaneously and lost the game," said David Eck, an archaeologist with the State Land Office, which owns the 20 acres southeast of Santa Fe on which the ruins sit.

Today, the same nameless arroyo that likely wreaked havoc on the pueblo's Tanoan-speaking residents is threatening to wash away the visible traces of their existence.

Centuries of monsoon-season flooding have eaten away at the arroyo's banks, atop which rest piles of rock showing the outlines of what were once blocks of rooms. Already, remnants of several of those rooms are thought to have tumbled down into the arroyo, erasing key evidence of what went where.

"We could lose so much of this

in one flood," said land office environmental engineer Thaddeus Kostrubala.

The erosion has also left some burial sites exposed and vulnerable to looters — the dead were sometimes buried below the floors of the living quarters.

But, this month, the state land office is completing a stabilization project meant to protect the pueblo with earthen retaining walls for the next 50 to 100 years.

Workers are stacking and staking bales of juniper along the arroyo's 14-foot-high vertical walls. The juniper was collected during forest-thinning

projects on trust land near Las Vegas, N.M., compressed and bound together. The bales will eventually be covered in soil and vegetated, forming a gentle slope buttressing and protecting the ruins.

Black fabric goes between the pre-existing and the new soil, demarcating for future generations where the preservation work occurred.

"Cultural resources in the Galisteo Basin have great significance in the Native American and Spanish colonial history of our state and these sites must be preserved and protected," said Lands Commissioner Patrick Lyons.

Sheltered between the Sangre de Cristo and Sandia mountains, the Galisteo Basin became a population center for pueblo communities in the 15th century. The weather was good, and conditions at the time allowed them to dry-farm corn.

Archaeological evidence shows Pueblo Blanco was one of

the region's big, densely populated sites, with about 1,450 rooms, a few plazas and kivas and about 1,500 people at its peak.

After a couple hundred years, archaeologists believe the region experienced changing weather patterns that caused both drought and flooding.

The community struggled to cope by constructing earthen dams that formed two or three reservoirs capable of holding several acre feet of water. But perhaps fed-up with erosion and with parts of their community washing away, the residents picked up and moved.

The traces of what they and other pueblos left behind, like rock art and potsherds, are frequently cited by opponents of a Texas-based company's plans to drill for oil and gas on the basin.

Congressional legislation in 2004 protected 24 of the archaeological sites, but money for a complete federal study of the basin's historic areas still hasn't been allocated.

Archaeologist Nels Nelson of New York City's American Museum of Natural History partially excavated Pueblo Blanco between 1912 and 1914.

A map drawn by Nelson indicated that, even back then, several blocks of rooms had already washed away. Eck, the land office archaeologist, estimates that further erosion has since destroyed another 5 percent of the pueblo.

Still, the bulk of the pueblo remains hidden — and protected — beneath earth, juniper and desert grasses.

THE SUNDAY JOURNAL

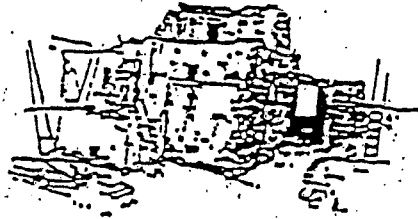
LOOKING AHEAD: According to the Old Fart's Almanac, the sun may be shining today, and the Indian Summer weather may be delightful, but winter will be coming soon! And that's not all bad, because winter is the time for that fantastic social event of the year, the SJBAS Christmas Party! So mark the date of this most important event on your calendar: it will be December 4th, the first Thursday of the month. We'll tell you all about the party plans in future issues of this newsletter.

SAN JUAN BASIN ARCHAEOLOGICAL SOCIETY

A Chapter of the Colorado Archaeological Society

If you're not a member of our group and would like to receive our newsletter, attend our monthly meetings, join us on our outings, and participate in our many other activities and those of the Colorado Archaeological Society (CAS), call our President John Viner (970-382-2594) and ask for information about our organization. Annual dues, including those for membership in the Colorado Archaeological Society, are listed below and are payable by checks made out to SJBAS and mailed to our Treasurer Mark Gebhardt, 107 St. Andrews Circle, Durango, CO 81301. Dues cover membership for the calendar year. Please note our new dues structure (no more regular vs. senior). With SWL means that the membership includes a subscription to CAS's quarterly journal "Southwestern Lore" (SWL). No SWL means that the journal is not included with your membership, hence the difference in the dues.

Individual (includes "Southwestern Lore")	SJBAS \$15.00+CAS \$16.00 = \$31.00
Individual (no SWL)	SJBAS \$15.00+CAS \$ 8.00 = \$23.00
Family (with SWL)	SJBAS \$20.00+CAS \$20.00 = \$40.00
Family (no SWL)	SJBAS \$20.00+CAS \$10.00 = \$30.00



www.sjbas.org

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