PART IV

Supplemental Materials

The record of the past speaks to us with relevance, as well as with eloquence—if we will only be silent and listen.

— Jim Collett
Iraan Archaeological Society Newsletter, March 1997
Texas Archeology at a Glance

Did You Know—

➤ Archeology is not the study of dinosaurs, or rocks, or fossils—archeology is the study of past human cultures.

➤ People came to North America over an Arctic land bridge across the Bering Strait, and they came to Texas thousands of years before Columbus arrived in the New World.

➤ American Indians did not use the bow and arrow until about 1500 years ago—earlier hunters used spears.

➤ Some stone points that people call arrowheads are really spear points.

➤ The horse was introduced to American Indians by the Spaniards after A.D. 1500.

➤ Bison (or American buffalo) were hunted by American Indians afoot—long before the horse was introduced into the New World.

➤ Changes in climate caused the extinction of many large mammals—such as a large bison (much larger than the bison of historic times) and mammoth—and this caused changes in the lifeways of prehistoric people for thousands of years.

➤ The Karankawa of the Texas coast spoke a language related to Indian languages of the Caribbean region, and the Karankawa may have come to Texas by boat in prehistoric times.

➤ Prehistoric Texas Indians were trading for turquoise and obsidian from New Mexico, shell from the Pacific and Atlantic coasts, and exotic stone from as far away as Minnesota.

➤ A stone quarry in Texas was used by many Indians of the southern Great Plains and is now a national monument—Alibates National Monument, in the Amarillo area.

➤ In addition to projectile points (stone points for arrows and spears), Indians made many other tools of stone, bone, and shell—including knives, drills, axes, awls, hoes, and grinding implements.

➤ Prehistoric people in Texas used plant fibers to make baskets, mats, sandals, and many other useful objects. Well-preserved woven sandals have been found by archeologists in the dry rock shelters of southwestern Texas.

➤ Some of the most impressive prehistoric rock art in North America is found in Texas—visitors can see excellent examples at Hueco Tanks and Seminole Canyon state parks.
Not all Indians lived in tipis—many Texas Indian villagers lived in thatched or adobe houses, and many nomadic groups lived in brush- or hide-covered shelters or rock shelters.

Corn has been cultivated in Texas for at least 2,000 years. Beans and squash were other staple foods of the early Texas agriculturalists.

Many Texas Indians made ceramic pots for cooking and storage, and the Caddo of Northeast Texas and the farmer-villagers along the upper Rio Grande made elaborately decorated vessels of many shapes and sizes.

The accounts of early explorers can help archeologists understand many sites. Much that we know about the historic Indians of southern Texas comes from the accounts of Cabeza de Vaca, who was shipwrecked on the Texas coast and traveled through southern Texas and northern Mexico for eight years, from 1528 until 1536.

The first black explorer in Texas was Estevanico, a Moor who traveled with Cabeza de Vaca.

The Tigua Indians came to the El Paso area from New Mexico in the 1680s, and some of their fields have been in continuous cultivation since that time.

The Alamo is a Spanish mission and was the first mission established in San Antonio, in 1718.

The first ranches in Texas were the 18th-century Spanish mission ranches along the San Antonio River, where mission Indians tended the livestock.

Archeological studies at historic sites (such as early settlements, forts, and homesteads) also fill in gaps in Texas history, from the Spanish Colonial period to the present.

As many as 90% of the recorded archeological sites in some areas of Texas have already been destroyed.

By participating in local, regional, and state archeological societies and preservation groups, by participating in and supporting Texas Archeology Awareness Month (held annually in October), and by learning more about archeology in Texas, you can make a difference. Please help us preserve your archeological heritage.
Decorate Your Own Caddoan Pot

Create your own design for this ceramic bowl, using the kinds of decorations that the Caddoan Indians of East Texas used. Some sample designs are shown at the bottom of this page. Geometric designs (especially circles and triangles) were common. Remember that the Indians did not have all of the colors that we use today. They used colors that could be made from grinding and mixing natural things. Red, black, and shades of brown were the most commonly used colors.
**PALEOINDIAN CROSSWORD**

**CLUES**

**Across**

1. A stone tip for a dart
2. A mammoth resembles this animal
5. What dart points were made of
6. A large animal hunted by Paleoindians
10. People who move about from place to place in search of food
11. Describes types of animals that no longer exist
12. Paleoindians hunted mostly large ones
14. With 3 down, another name for Indians

**Down**

1. What the first prehistoric people are called
3. We do not know these for past cultures
4. How Paleoindians got some of their food
7. With 14 across, another name for Indians
8. The state we are in
9. Paleoindians ate these also
13. What you might record on rock if you had no written language
ANSWERS for PALEOINDIAN CROSSWORD
Archaic Period Word Search

From the word list below, find and circle the words in the puzzle. The words can be formed forward, backward, or diagonally.

J G A X D C M N A C M C P
R O U L B E E P I X Q D A
ARCHAIC  L  C  T  U  L  D  K  A  L  S  I  S  K
CLIMATE   U  O  A  R  D  I  H  Z  T  A  P  D  R
LECHUGUILLA P  S  T  I  A  C  U  N  Q  E  N  J  H
MIDDEN T M M O R K I G A D X T C
OVEN  X Q O A S O C R U D G S S
PLANTS I B Z Y P L I O D H Y E Z
POINTS P L E O I I F A R U C N C
ROCK ART E D N M I C U E N S H E L
SOTO L C O A A U Q H E X U P B L
SPEAR N T U N S A V Z E B H L F
E E L T E O B E Q P R S G

The figures below are examples of rock art figures from the Lower Pecos region of West Texas. Write what you think each figure represents.
ANSWERS: Archaic Period Word Search
Old and New Words Crossword

Find the words for the puzzle by filling in the blanks in the clue sentences. The shaded letters in the crossword are extra clues to help you find the right words. Just for fun, this crossword contains a few words that you probably already know. Some of these "old" words are not related to archeology or Native Americans. When you have completed the puzzle, circle the words that you would not use in a story about the Indians of Texas.

**CLUE SENTENCES**

**Across**

1  Indians who were nomads lived in temporary _ _ M _ _ .

2  _ _ A _ _ work was used to decorate clothing.

10  Explorers from across the Atlantic _ _ A _ _ came to Texas in the 1500s.

11  There were _O_ horses in Texas when prehistoric people were here.

12  You would not be _ _ _ _ I _ _ _ if you did not have a written language.

14  _ _ _ R were one of the smaller animals hunted by Archaic people.

16  _A_ is an old-fashioned word for Dad, who was usually the storyteller in a family group.

19  Archeologists believe that people first came _ O_ Texas about 12,000 years ago.

22  Archeologists call the first era of prehistory the _ A _ _ _ _ _ _ _ _ _ _ _ period.

24  In songs and stories, the plains of the West are called "wide _ _ _ _ N _ spaces."

25  _ _ am one of many Americans who have Native American ancestors.

26  Prehistoric people used stone, not _ _ _ T _ L, to make their tools.

29  _ _ P _ _ is another way to spell "Teepee."

30  Dry lands like those in far west Texas are also called _ _ _ _ _ _ _ _ _ _ _ _ lands.

33  Liver and heart, called _ _ _ _ _ N _ meats, are often favorite foods of hunting peoples.

35  Most movies about Indians do not give a very _ R _ _ _ view of their history.

38  If a prehistoric person wanted something _ _ _ _ T, they may have eaten honey.

40  The _ _ _ M, also called a sweet potato, is a New World food.

**(Clues continued on back of this page)**
41 A chicken _ _ N is now a common domesticated animal in Texas, but in prehistoric times only dogs and turkeys were domesticated in North America.

42 _ E is another word for 25 across.

43 People who live in camps in winter are glad when the snow _ E _ _

Down

1 In Late Prehistoric times, _ _ _ _ N was the most important food crop.

2 The _ _ _ _ is a card in a popular modern game. What kinds of games do you think prehistoric peoples played?

3 The bison, or buffalo, was hunted for its M _ _ _ and hide.

4 If you have 18 down, you can write on a note _ A _.

5 If you do 39 down, be sure to _ _ I _ your thread carefully.

6 Would you like to hunt a _ _ I _ animal with only a spear?

7 No one can write a very long story without using the word A _ _.

8 A _ O _ is the female of 14 across.

9 The _ _ R used with a canoe is called a paddle.

10 Many American Indians today prefer to be called _ A _ _ _ _ Americans.

11 Is a fight an V _ _ match if one side has guns and the other has only bows and arrows?

12 Some lines in rock art could be a _ A _, showing the way to a meeting place or a water hole.

13 You do not need a _ _ N if you have no written language.

14 Indian paintings O _ stone are called rock art.

15 The permanent _ _ _ _ A _ _ is a Late Prehistoric development.

16 E _ _ _ R making is also a Late Prehistoric development.

17 _ _ _ P also means jump.

18 The T _ _ _ _ is a tool used by archeologists.

19 Prehistoric people could make a _ _ _ _ N or a needle from sharpened bone.

20 If you feel _ L _, you may be given medicine based on a Native American herbal cure.

21 The A _ _ of a site can be learned through scientific study.

22 The bones of rodents, such as the pack _ _ T, are often found in archeological sites.

23 What people like to _ _ T often varies from nation to nation, and even from state to state.

24 I _ M very interested in archeology.

25 _ _ E is not a he.

26 We know prehistoric people could _ E _ because archeologists have found needles made of bone in many sites.
How can I become a professional ARCHEOLOGIST?

What is a professional archeologist?

A professional archeologist is a person who has received formal academic training in archeological method and theory and is knowledgeable about the laws that govern site investigations. Professional archeologists do not sell, trade, or collect artifacts for personal collections or gain. They are social scientists who seek information about prehistoric and historic peoples through the study of material culture. The artifacts recovered from scientific excavations are housed in public curation facilities and are available to other researchers for study.

In Texas, there is a long tradition of cooperation between professional archeologists and avocational archeologists. While many avocational archeologists are highly trained and have made substantial contributions to our understanding of Texas archeology, their archeological pursuits are largely voluntary.

Quite distinct from professional and avocational archeologists are "pot hunters." Pot hunters are not concerned about the meaning of the artifacts they retrieve from the ground. Their primary goal is to obtain objects of antiquity. Some pot hunters have no regard for land ownership and regularly trespass onto public and private property in order to dig up artifacts for their personal collections or for eventual sale.

What kind of background is helpful to a professional archeologist?

Anyone considering a career in archeology should be well informed in many different fields. Mathematics, geology, biology, and other disciplines are important to the study of archeological remains. Sharing of the results of investigations is a vital part of archeology, so good public speaking and technical writing skills are essential. Dedication to detail and patience are also helpful to archeologists. This is because archeological projects involve painstaking work and are not "Indiana Jones" adventures.

Where can I obtain the necessary training to become a professional archeologist?

Joining archeological societies committed to archeological preservation, such as the Texas Archeological Society (TAS) and various local groups, is relatively inexpensive and often helpful to students facing career choices. The TAS even has a special youth program as part of its field school, which is held in June of each year. Proper field and laboratory techniques are taught by these organizations. They also provide forums for hearing about current projects.

Students who choose to pursue a career in archeology should plan to attend a college or university with a degree program in anthropology. In addition to the Universities of Texas at Austin and San Antonio, several public and private universities in Texas offer undergraduate and graduate degrees in anthropology (with archeology specialization). Texas A&M University even has an underwater archeology program.

What job opportunities are there for professional archeologists?

Numerous job opportunities are available to archeologists with graduate degrees, such as academic instruction, museum curation, and archeological contracting. Various governmental agencies, such as the National Park Service and Texas Department of Transportation, also employ archeologists. Archeological contractors hire archeologists with graduate degrees for supervisory roles and those with undergraduate degrees for their field crews.

How do professional archeologists stay informed?

Professional archeologists are often members of numerous local, statewide, regional, and national archeological groups. Such organizations produce newsletters and journals that enable archeologists to stay informed about the latest research, newest techniques, and other related issues. The Council of Texas Archeologists (CTA) is the organization for professional archeologists in Texas. The CTA newsletter informs members about current issues and projects.
of interest in the state. CTA membership is open to college students.

Archeological Societies in Texas

Opportunities to assist in an archeological excavation, survey, or lab work are available through the Texas Archeological Society and often through local archeological societies. Contact Texas Archeological Society, c/o Center for Archeological Research, UT at San Antonio, 6900 N. Loop 1604, San Antonio, TX 78249-0658 for membership information. For a list of local archeological societies in Texas, contact Archeology Division, Texas Historical Commission, P.O. Box 12276, Austin, TX 78711.

Professional archeologists and college students may join the Council of Texas Archeologists, the statewide professional organization. Avocational archeologists may also receive the CTA newsletter. For information, contact Council of Texas Archeologists, c/o Texas Archeological Research Lab, J.J. Pickle Research Campus #5, Austin, TX 78712-1100.

Fieldwork Opportunities in Texas

Texas Archeological Society Field School. During the month of June, The Texas Archeological Society offers an annual ten-day field school, open to all members regardless of age or experience. The projects are directed by experienced professional and avocational archeologists, with training available for persons with any level of skill and experience. Activities include excavation or survey, afternoon workshops, and evening lectures. Contact: Texas Archeological Society, c/o CAR, UT at San Antonio, 6900 N. Loop, 1604 West, San Antonio, TX 78249-0658.

Southern Texas Archeological Association Field School. The STAASF offers a 9-day field school during the month of September. Working under the direction of a professional archeologist, participants can experience archeological survey, excavation, and/or lab work. Contact: Southern Texas Archeological Association Field School, P.O. Box 791032, San Antonio, TX 78279.

Archeological Contractors

Numerous institutions and private companies do archeological contract work in Texas and hire archeologists with varying levels of experience. To obtain a listing of archeological contractors in Texas, request a copy of the CTA Contractors List from Archeology Division, Texas Historical Commission, P.O. Box 12276, Austin, TX 78711-2276.

Archeology Programs in Texas Universities

Each listing below is followed by notations concerning the degree programs offered.

Department of Anthropology
E.P. Schoch Bldg. 1.130
The University of Texas at Austin
Austin, TX 78712 B.A., M.A., Ph.D.

Department of Anthropology
Texas A&M University
College Station, TX 77843 B.A., M.A., Ph.D.

Department of Anthropology
Southern Methodist University
Dallas, TX 75275 B.A., B.S., M.A., Ph.D.

Anthropology
Chilton Hall 308
University of North Texas
P.O. Box 12928
Denton, TX 76203-2928 B.A., B.S., M.P.A. in Geography has archeological components

Department of Sociology and Anthropology
103 Benedict Hall
The University of Texas at El Paso
El Paso, TX 79968 B.A., M.A. in Sociology

Department of Anthropology
Rice University
Houston, TX 77251 B.A., M.A., Ph.D.

Department of Anthropology
Texas Tech University
Lubbock, TX 79409 B.A., M.A.

Department of Sociology
Stephen F. Austin State University
P.O. Box 13047, SFA Station
Nacogdoches, Texas 75962 B.A.

Department of Sociology and Anthropology
Trinity University
715 Stadium Drive
San Antonio, TX 78212 B.A.

Division of Behavioral and Cultural Sciences
The University of Texas at San Antonio
San Antonio, TX 78249 B.A., M.A.

Southwest Texas State University
Department of Anthropology
601 University Drive
San Marcos, TX 78666-4616 B.A.

The staff of the Archeology Division, Texas Historical Commission are available to answer additional questions and to assist in scheduling speakers for career days. Contact:

Archeology Division
Texas Historical Commission
P.O. Box 12276
Austin, TX 78711-2276
(512) 463-6090.
Archeology is a science. All archeological excavations should be done under the direction of a professional archeologist. Do not dig in any site.

Because archeology is a science, archeologists rarely make black-and-white statements. So, now that we have your attention, we'll explain some of the gray areas:

➢ Digging layers of soil in square holes is not archeology.

➢ Identifying artifacts removed from square holes is not archeological analysis.

➢ Digging on school property or other public lands in Texas is against the law.

➢ Teaching students to dig without the supervision of a professional archeologist encourages site vandalism.

➢ Every archeological site is unique; a site, once destroyed, can never be replaced.

➢ Your support for archeological preservation is desperately needed.

Please contact the State Archeologist, Texas Historical Commission, P.O. Box 12276, Austin, TX 78711-2276 (512/463-6090). We can help you with information on how to teach about archeology and the Indians of Texas without digging. We do want you to

SUPPORT TEXAS ARCHEOLOGY

For more information: Archeology Division, Texas Historical Commission, P.O. Box 12276, Austin 78711-2276
STONES or BONES—What Is an Archeologist?

Does an archeologist study arrowpoints?

Well, archeologists are interested in stones, bones, and caves, but yes is the answer only to the first of the questions at the side of this page. Call on a paleontologist for dinosaur bones, and a geologist for caverns. Why? Let's look at some slightly expanded versions of Webster's definitions of archeologist, paleontologist, and geologist.

**Archeologist**—a scientist who studies the life and culture of ancient peoples, as by excavation of ancient cities, relics, and artifacts (tools made and used by humans). Key word: **humans**.

So, the archeologist is not interested in dinosaur bones, because there were no humans when dinosaurs lived. The archeologist is interested in animal bones and plants only if they are associated with human history. For example, archeologists are interested in the bones of animals if there is associated evidence of hunting or butchering by humans, or if humans used the bones to make tools or ornaments. Archeologists are interested in stones only if humans used the stones as tools, or as materials to make tools, or as building materials, or as hearthstones. And archeologists are interested in caves only if they were occupied or used by humans.

What about dinosaur bones?

**Paleontologist**—a scientist who studies the life forms of past geological periods through analysis of fossil remains of plants and animals and who seeks information about the development and relationships of modern plants and animals and the chronology of the history of the earth. Key word: **fossils**.

So, call the paleontologist to look at your dinosaur bones, dinosaur tracks, snail fossils, petrified wood, clam fossils, and interesting creatures captured in Texas limestone. In general, the fossils that interest the paleontologist are much older than human history.

What about underground caverns?

**Geologist**—a scientist who studies the history of the earth and its life, especially as recorded in the rocks. Key word: **rocks**.
So, geologists are interested in rock formations (such as underground caverns), and most of the earth's rock formed long before humans inhabited the earth. The history of the earth is even older than dinosaur fossils. Geologists are also interested in how rock strata change, so they study current processes such as volcanoes. Fortunately, there are no active volcanoes in Texas, but we do have lots of rocks, gemstones, underground caverns, and other fascinating geological items.

Why the Confusion?

If these scientists are so different, why do we so often confuse them? Mostly because stone was so important to prehistoric people that archeologists in Texas spend a lot of time studying artifacts made of stone. And stone is interesting to the geologist because it's part of earth history, and to the paleontologist because fossils often occur in rock. So archeologists, paleontologists, and geologists all like rocks—for different reasons.

Just to add to the fun and confusion, rocks sometimes occur in natural shapes that look somewhat like stone axes or other tools made by humans. And rocks also occur in natural shapes that may look a little like fossils or footprints. When in doubt, contact an expert—an archeologist, a geologist, or a paleontologist.

Want to know more?

Join the Texas Archeological Society and receive the society's annual bulletin and quarterly newsletter, participate in the summer field school, and attend the annual meeting. You will meet people who share your interests, and you will have the chance to learn about Texas archeology and prehistory through hands-on fieldwork under the direction of professional archeologists. For membership information:

Texas Archeological Society
c/o Center for Archaeological Research
University of Texas at San Antonio
6900 N. Loop, 1604 West
San Antonio, TX 78249-0658.

Who has the answers?

The Archeology Division, Texas Historical Commission, has information on all aspects of archeology in Texas. For example:

- a list of local and regional archeological societies in Texas
- a booklet of resources for teachers
- a booklet of resources for museums
- a booklet of resources for county historical commissions
- a free copy of You Are the Guardian of the Past, which describes the range and importance of archeological sites in Texas
- or the answers to your specific questions about archeology, prehistory, and the Indians of Texas

ARCHEOLOGY DIVISION, TEXAS HISTORICAL COMMISSION
P.O. Box 12276, Austin, TX 78711-2276 • (512) 463-6090
The Masks of October
An Archeological and Anthropological Project for Young People

Introduction

Why do we wear masks for Halloween?
Because we're pretending to be ghosties, ghoulies, and things that go bump in the night so someone will give us candy or so we'll be the hit of the costume party.
But is that really all there is to it?
Of course not. Modern folks are basing their playful behavior on some very old myths, traditions, and rituals. People have worn masks since ancient times, partly for fear that there might really be spooks out there somewhere.
The month of October is an excellent time to do a mask-making project that is also a learning experience for young people. The painting or making of masks can be used as an opportunity to:
• Seriously consider why and how traditional peoples made real ceremonial masks.
• Explain that some traditional cultures still use masks today.
• Talk about mask designs in Texas rock art.
• Discuss the significance of rock art and why we need to protect and preserve it.
• Have fun.

Project Suggestion I

Mount panels of brown paper on a bulletin board, or on cardboard mounted on a wall. Or, if you have some blank wall space, cover it (up to an easily reachable height) with heavy brown paper. Test the paper first to make sure that the paint or markers you plan to use won't seep through a single sheet of paper onto the wall.

Make photocopies of masks for each child to study, or post copies of the rock-art mask designs above your brown paper "rock art panel."

Provide a black and a red fine-point, permanent marker to each child. Suggest that they create masks of their own to celebrate the seasons or to bring success in farming, hunting, or fishing. Encourage them to create original masks, not just typical Halloween masks. Follow up with a discussion of what their masks mean to them.

Give your "rock art" panel a title, post a bit of text about the masks and rock art, and list the names of the artists—and there's your art exhibit.

Project Suggestion II

If you don't want to create panels on a wall, give each child several pieces of stiff paper (about 8 1/2 x 11 in.) and instruct them to create one mask on each sheet.

Create a display of the masks. Mounting the drawings on slightly larger pieces of color coordinated paper will make them more attractive and add a finished look to the display.

Project Variations

(1) Rather than restricting participants to black and red, talk about how similar but brightly colored masks have been used throughout history. Give the participants paper and paints and let them use their imaginations to create their own versions of masks.

(2) Get plain paper bags of a size to fit nicely over a child's head. If desired, shorten the bags by trimming the bottoms. Assist in correctly placing eye and nose
holes in the bags; add a few extra air holes on the sides. Then each child can paint a mask, wear it (briefly), and keep it.

(3) Provide an oval, face-sized pattern (or template) to each participant. Instruct them to draw the basic face outline onto a piece of stiff paper. They can then paint, add hair or ears, etc., cut out eye holes and nose flaps, add string, and wear their masks. These masks can either be displayed or kept by the participants.

(5) For younger children use that old favorite, the bendable paper plate. Proceed as with other masks on paper.

**For More Fun**

Supply colored yarn, bits of ribbon, plastic beads, small twigs, feathers, cardboard tubes, tissue paper, or other bits and pieces, and some glue. For any of the above variations, the participants can decorate their painted masks with the “add-ons.”

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**Masks Project Booklet Available**

If you would like to undertake an educational and fun mask-painting project for Texas Archaeology Awareness Month, you can order a project booklet that contains an illustrated background text on ceremonial masks, Native American mask-making cultures, and drawings of numerous Hueco Tanks rock-art mask designs. $3.00 (covers postage and handling).