

2013 CTA Fall Meeting, October 25, 2013

Business Meeting—Del Rio Civic Center, 1915 Veterans Blvd., Del Rio, TX 78840

CTA Careers in Archaeology Social—8:45 PM

Agenda

Registration – 9:00 AM

Call to Order – 9:30 AM

Announcements

Approval of Minutes, Spring 2012 Meeting

Officers' Reports

- President (*Rachel Feit*)
- President elect (*Melissa Green*)
- Secretary (*Kristi Miller Nichols*)
- Treasurer (*Carole Leezer*)
- Newsletter Editor (*Mindy Bonine*)

Standing Committee Reports

- Auditing (*Mark Denton*)
- CTA Communications (*Mindy Bonine*)
- Contractors List (*Shelly Fischbeck*)
- Curation (*Laura Nightengale*)
- Governmental Affairs (*Nesta Anderson*)
- Multicultural Relations (*Mary Jo Galindo*)
- Nominating (*Bill Martin*)
- Public Education (*David Brown*)

Special Committee Reports

- Academic Archeology and CRM (*Jon Lohse*)
- Anti-looting Committee (*Jeffery Hanson*)
- History (*Doug Boyd*)
- Membership (*Becky Shelton*)

Agency Reports

- Texas Historical Commission (*Pat Mercado-Allinger*)
- Texas Parks and Wildlife (*Michael Strutt*)
- Texas Department of Transportation (*Scott Pletka*)
- Texas Archeological Research Laboratory (*Jonathan Jarvis*)

Old Business

Results of inquiry into CTA presidential term limits
Please renew your memberships!

New Business

2014 Budget- trying to get back on track
Texas State Survey Results
Letter to National Geographic Channel Opposing
Diggers and proposed Anti-Looting Brochure

Meeting Adjourns - 12:00 PM

CTA Careers in Archaeology Social – 8:45 PM

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**Zac Seldon's Petrofacies Report
and Poster Attached to Back of
Newsletter**

President's Forum

By Rachel Feit

Del Rio is just around the corner and we have a lot of ground to cover at the upcoming CTA meeting, scheduled for October 25, 2013. First, we will be tackling the 2014 budget this Fall. Carole Leezer, our CTA treasurer, discovered that in recent years we have fallen off-cycle in terms of presenting and approving budgets for the coming year. Under our by-laws, budgets are to be presented and approved during Spring meetings for the coming fiscal year. Therefore, although we just approved a 2013 budget during the Spring meeting, we were actually a year behind, and will need to present and approve a 2014 budget again this October to get ourselves back on track for 2015 at the next Spring meeting. I would like to urge everyone to consider what role they would like to see CTA play for the archeological community, to consider how and where to apply surplus funds, over the coming year(s). For 2013, we allocated \$2,100 to the Texas Archeological Society's Multicultural Program. We will discuss whether we want to continue this level of funding for the TAS program, or to fund other worthy programs that support the mission of the CTA. Come prepared to discuss. Please see the agenda for the meeting in this newsletter.

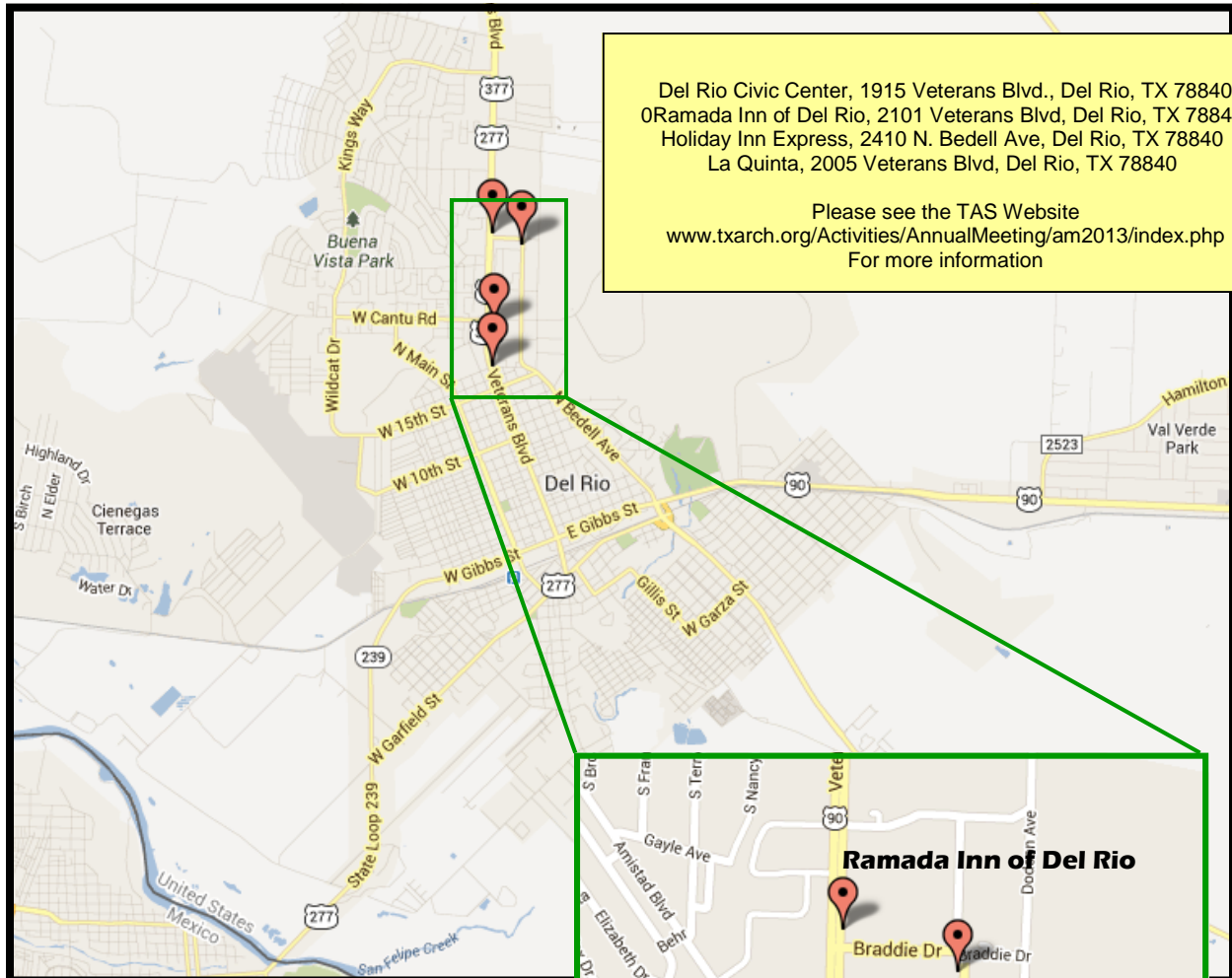
I want to thank everyone who took the time to take Texas State's short career and demographics survey. We've had more than 130 responses, which represents a statistically significant percentage of our (active) membership. Britt Bousman, of Texas State, may not make it to the CTA meeting this October, and if not, I will present and discuss the results of the survey to the membership in his place. So far the data have been very illuminating.

In terms of operations, the CTA awarded five Texas Archeological Awareness grants of \$500 apiece this year. The recipients of those grants were the Bell County Museum, Brazoria County Historical Museum, the Bosque Museum, Legacy: Hands on the Past, and the Plano Conservancy for Historical Preservation.

Jeffery Hanson, our Anti-Looting Committee chair has been busy this past month circulating a petition protesting the show *Diggers*, which airs on the National Geographic Channel. At last count the petition had almost 1,500 signatures from ar-

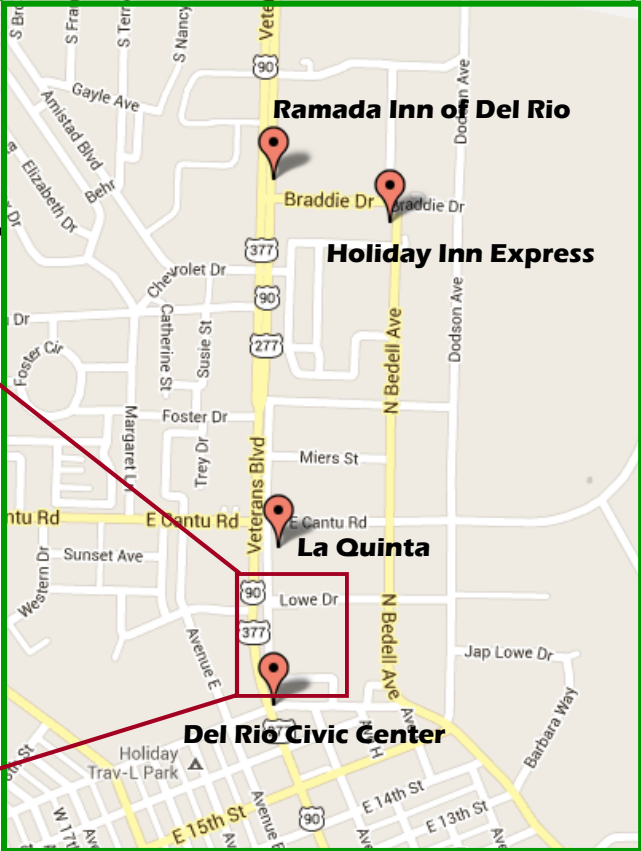
cheologists across the country. This is not the first time National Geographic Channel and other networks with similar shows have heard protest from archeologists about the disrespectful manner in which shows like *Diggers* treats the archeological process. And although last year the networks made concessions to address some of the more grievous issues archeologists had (the National Geographic Network, for instance, now employs a consulting archeologist to publically clarify points of process), the shows continue to portray archeology as a treasure-hunting sport, rather than a serious endeavor to support historical inquiry. Jeff has also drafted a letter that will be sent to a representative of the National Geographic and other networks that are currently airing *Diggers* type shows. A copy of that letter is included in this newsletter.

84th Annual Texas Archeological Society Meeting Del Rio, Texas



Del Rio Civic Center, 1915 Veterans Blvd., Del Rio, TX 78840
Ramada Inn of Del Rio, 2101 Veterans Blvd, Del Rio, TX 78840
Holiday Inn Express, 2410 N. Bedell Ave, Del Rio, TX 78840
La Quinta, 2005 Veterans Blvd, Del Rio, TX 78840

Please see the TAS Website
www.txarch.org/Activities/AnnualMeeting/am2013/index.php
For more information



M A P S

**Texas Archeological Society (TAS)
Annual Meeting Schedule at a Glance**

All events take place at the Del Rio Civic Center unless otherwise noted.

Friday, October 25, 2013

8:00 a.m.–6:00 p.m.	Registration:	N. Lobby
9:00 a.m. –5:00 p.m.	Exhibits and Book Sales:	Kennedy Room
9:00 a.m.–5:00 p.m.	Silent Auction:	Chamber Boardroom
9:00 a.m.–12:00 p.m.	CTA Meeting:	Pecan Ballroom
1:00 p.m.–2:00 p.m.	Stewards Meeting:	Pecan Ballroom
2:00 p.m.–5:20 p.m.	Concurrent Sessions:	Red Oak Ballroom
3:00 p.m.–3:30 p.m.	TAS Executive Committee:	Pecan Ballroom
3:30 p.m.–4:30 p.m.	TAS Board Meeting:	Pecan Ballroom
6:00 p.m.–9:30 p.m.	Cash Bar Social:	Concession, S. Lobby
7:00 p.m.–8:30 p.m.	Public Forum:	Pecan Ballroom
8:45 p.m.–10:00 p.m.	Artifact Identification:	Pecan Ballroom
8:45 p.m.–10:30 p.m.	CTA-sponsored Social:	Pecan Ballroom

Friday, October 25, 2013 TOUR SCHEDULE

10:00 a.m.–11:30 a.m.	Fate Bell/Seminole Canyon State Park
10:00 a.m.–11:30 a.m.	White Shaman
10:00 a.m.–3:30 p.m.	Meyers Springs
2:00 p.m.–3:30 p.m.	Painted Shelter
3:00 p.m. –4:30 p.m.	Fate Bell/Seminole Canyon State Park

Saturday, October 26, 2013

7:00 a.m.–3:00 p.m.	Registration:	N. Lobby
8:00 a.m.–5:00 p.m.	Exhibits and Book Sales:	Kennedy Room
8:00 a.m.–4:00 p.m.	Silent Auction:	Chamber Boardroom
8:00 a.m.–5:00 p.m.	Concurrent Sessions:	See schedule
12:00 p.m.–1:30 p.m.	Luncheon/Business Meeting:	Pecan Ballroom
2:00 p.m.–4:40 p.m.	Poster Session:	Red Oak Ballroom
4:30 p.m.	Silent Auction Wrap-up:	Chamber Boardroom
6:00 p.m.–7:00 p.m.	Cash-bar Social:	Concession, N. Lobby
7:00 p.m.–9:30 p.m.	Banquet, Awards, Program:	Pecan Ballroom

Sunday, October 27, 2013

7:30 a.m.–8:30 a.m.	TAS Executive Committee:	Pecan Ballroom
8:30 a.m.–9:45 a.m.	TAS Board Meeting:	Pecan Ballroom
9:00 a.m.–12:00 p.m.	Possible sessions	See schedule

Sunday, October 27, 2013 TOUR SCHEDULE

10:00 a.m.–11:30 a.m.	Fate Bell/Seminole Canyon State Park
10:00 a.m.–11:30 a.m.	White Shaman
10:00 a.m. –4:30 p.m.	Lewis Canyon
2:00 p.m.–3:30 p.m.	Painted Shelter
3:00 p.m.–4:30 p.m.	Fate Bell/Seminole Canyon State Park

Officer's Reports

Secretary Report

Kristi Miller Nichols

Greetings everyone! Here is your friendly reminder to start renewing your memberships for the 2014 year. As you know, membership with CTA is on a yearly basis, with each new year starting on January 1. Everyone's 2013 membership will expire on December 31, 2013. Membership renewals can be done in several ways. You are able to pay online via PayPal through the CTA website or by completing a membership renewal form (also on our website) and mailing it with a check to Council of Texas Archeologists c/o Kristi Miller Nichols, Center for Archaeological Research, The University of Texas at San Antonio, One UTSA Circle, San Antonio, TX 78249. In addition, we will gladly accept membership renewal forms at the CTA Fall Meeting at the 2013 TAS Conference in Del Rio. Please review our membership fees as contractors fees changed this year. Contractor fees have gone up to \$125 per year. Remember, you must be a member as well to be listed on the Contractors list. The other membership level fees have remained the same. Please take a moment to join the CTA_org Yahoo! Group. All notices to the CTA membership are posted to this email list and this is our main way of communicating with the CTA membership. This will be the quickest way to be up to date on changes and upcoming events and issues. If you are not currently on this list, please forward your current email address to Mindy Bonine at ebony2071@yahoo.com and she will see that you are added to the list server.

As of the beginning of September, our membership consists of 11 students, 132 professionals, and 56 contractors. Our numbers are slightly down from previous years. Membership fees are where we bring in the majority of our revenue to use for scholarships, grants, and meetings. Please renew your memberships and encourage others to join CTA.

Treasurer Report

Carole Leezer

It has come to my recent attention that we have been a year behind in our budgeting. According to the CTA Bylaws "an annual budget for the coming year will be presented at the Spring Meeting of the CTA". In order to "catch-up" the 2014 Proposed Budget will be presented at the Fall Meeting of the CTA. The 2015 Proposed Budget will be presented at the 2014 Spring Meeting of the CTA. A copy of the 2014 proposed budget is contained within this newsletter for membership review.

As of August 29, 2013, our checking account contains \$10,694.34; the money market account contains \$18,901.84; and our scholarship fund contains \$8,763.88. Please be aware that contractor listing fees have increased to \$125 per listing; membership dues remain the same - \$30/\$15 for professional members and \$25/\$15 for students. It's never too early to renew your membership! Please help us continue to serve the archeological community and the public, join or renew your membership today!

Newsletter Editor Report

Mindy Bonine

I want to thank Bill Moore and Jesse Todd for their recent submissions to the CTA Publications page of the CTA website. If anyone would like to submit a publication to be included, please let me know at ebony2071@yahoo.com.

Committee Reports

Multicultural Relations

MULTICULTURAL SCHOLARSHIPS BROADEN TEXAS HORIZONS IN 2013

The TAS Multicultural Scholarship Program is off to a great start this year, thanks to your support. Diversity scholarships have increased the participation of underrepresented groups in Texas archaeology, as reported by Subcommittee chair Nedra Lee. Since the program's inception in 2006, 13 students have received scholarships to gain skills in archeological survey and field methods. In 2013 Diversity scholarships were awarded to Kelly Millan of The University of Texas at Austin and Courtney Streat of Baylor University. Kelly gained field experience at the Archeology 101 Academy in Victoria, Texas. She enjoyed attending the academy and is currently applying what she learned in another field school at Antioch Colony, a historic freedmen's community in Buda, Texas.



Kelly Millan found a dart point during the TAS Academy at the McNeill site.

Courtney Streat was excited by the opportunity to work at the post-Emancipation Mission Valley settlement in Hondo during Field School. With family roots in Rusk County, she is interested in learning more about the struggles and tribulations of black families in east Texas. Participation in these events also has helped Kelly and Courtney to complete their course requirements in archeological studies. Their TAS experiences show the

benefits of fostering a more diverse archaeology in our state.



Courtney Streat (background) and Lauren Linthicum (foreground) learn about prehistoric fire-making.

A Collegiate Field School scholarship was awarded to Lauren Linthicum of Baylor University. She provided Subcommittee chair Tim Sullivan with this report: "This was my first year participating in the TAS Field School. I was thrilled to go on this trip and was blessed to receive the Collegiate scholarship to help me get there. I had a wonderful experience! I met a lot of new people and learned many different things from them such as how to make a fire like ancient people. This scholarship also gave me the opportunity to get things I needed for field school (such as my tent and other supplies) and made it easier on my parents. The things that I gained from this experience will stay with me for the rest of my life and I hope to attend more field schools in the future. I can't stress enough how thankful I am for the scholarship!"

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C O M M I T T E E R E P O R T S

Committee Reports

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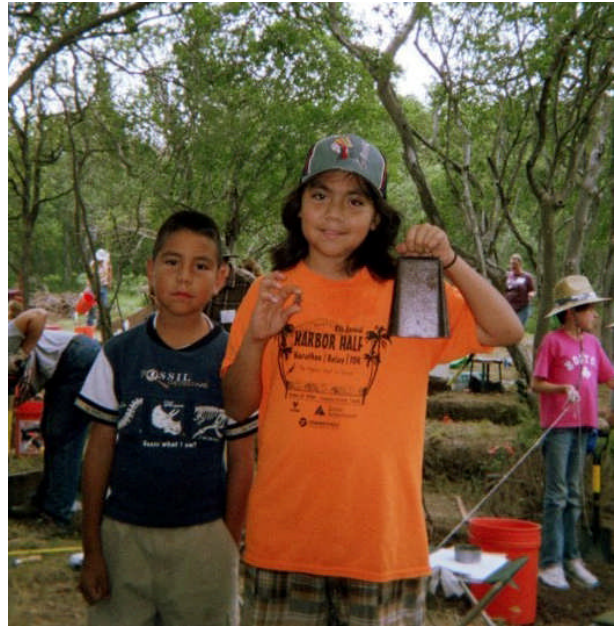
Tribal outreach at this year's Field School was a resounding success according to Native American Subcommittee chair Marie Archambeault. Seven scholarships were awarded to individuals from Texas and Oklahoma representing four tribes (Alabama-Coushatta Tribe of Texas, Lipan Apache Band of Texas, Navajo Nation, and Seminole Nation), three families, and two aspiring young archeologists. Since the inception of this program in 2003, TAS has awarded 95 Field School scholarships to Native Americans! Six of the 2013 scholarship recipients were first-time attendees, and it was the first year for members of the Navajo and Alabama-Coushatta Nations to attend.

Cristian and Samuel Swift (7 and 10 years old respectively) are members of the Navajo Nation, and attended with their father and grandmother, Jonathan and Sylvia Swift. The boys first learned they were receiving the scholarships during an end-of-year awards ceremony at their public school in Corpus Christi. The family eagerly participated in all of the Field School activities, and Samuel and Cristian received the Most Enthusied Diggers award on the last night. Enthusiastic certainly describes this family!

Jenna Battise and her daughter Charley from the Alabama-Coushatta Tribe of Texas also participated in the 2013 Field School. Jenna is an environmental specialist for the tribe. Ten-year-old Charley is an aspiring archeologist, and was so eager to learn about archeological methods that she attended the adult newcomer orientation. Jenna reported that "The experience was wonderful; it really made an impact on Charley. She was able to get the hands-on experience I was hoping for her."

Abby Brown of the Lipan Apache Band of Texas has attended Field School every year that it was held at Eagle Bluff. She is an athletic coach in the Pawnee Texas ISD, and sponsored one of her students to attend this year. About her experience, she said "We can't wait for next year. Every year I learn so much. As always, there was a great group of people to work with and to learn from. Thanks!"

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Cristian and Samuel Swift ring the Youth bell after excavating their first projectile point.



Charley Battise finds her first projectile point during excavations at Eagle Bluff.

C O M M I T T E E R E P O R T S

Committee Reports

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Emman Spain and his grandson Maury Gaddis are members of the Seminole Nation, and drove all the way from Konawa, Oklahoma to get to Field School. Maury is a 14-year-old aspiring archeologist, and worked with the adults at Eagle Bluff. Emman's storytelling provided entertainment for other crew members fortunate enough to work alongside him. Emman is the Tribal Historic Preservation Officer for the Muscogee (Creek) Nation of Oklahoma. He said he's had his eye on the TAS scholarship program for a while, so when his grandson told him that he wanted to be an archeologist, they jumped at the opportunity!



Emman Spain enjoyed sharing stories while getting his hands dirty.

These scholarships are made possible through the commitment of donors, many of whom contribute every year. Donations were outstanding in 2013! From contracting firms to professional organizations to individual TAS members, financial support for the Multicultural scholarship programs

added up to almost \$5000! Royce Baker was the largest individual contributor, providing funds for three scholarships. The combined contributions of other TAS members supported three more scholarships. AR Consultants and Prewitt & Associates, Inc. each supported a Native scholarship, and the Council of Texas Archeologists generously provided funding for six Multicultural scholarships!

Thanks to these generous donors, TAS has been able to broaden understanding of Texas's past and the diverse people who study it. The presence of Multicultural participants in the 2013 Academy and Field School increases the visibility of scholarship programs and will lead to additional interest for next year. Due to this strong turnout our stores of field equipment are depleted, and next year the need will be great! You can support this endeavor by donating equipment for scholarship dig kits, including trowels, root clippers, brooms and dust pans, water bottles, rulers, graph paper, pencils, and Sharpies. Email Marie Archambeault at marie.archambeault@thc.state.tx.us to arrange to make a donation.

Texas Historical Commission Reports

How Do the Non-Archeologists at THC Review Projects?

Linda Henderson

Preamble Ramble

The Texas Historical Commission (THC) has many roles in the state, from protecting the state's underwater shipwrecks to recognizing important stories and places through Official Texas Historical Markers and historical designations. One critical job is to review the potential for projects to impact historic and cultural resources. Under the Texas Antiquities Code, THC staff reviews projects on land owned by the state or subdivisions of the state for direct impacts to any site eligible for State Antiquities Landmark (SAL) status, until recently known as a State Archeological Landmarks. Properties designated as such includes cultural deposit, as well as buildings, structures, and districts listed in the National Register of Historic Places (NRHP); NRHP listing is a prerequisite to SAL designation. THC is also Texas' State Historic Preservation Office (SHPO), under the authority of which THC staff review projects under Section 106 of the National Historic Preservation Act. THC staff recently updated web pages related to Project Review: <http://www.thc.state.tx.us/project-review>, and many of the legal or review process questions you might have may be answered there.

Tell Me Something I Didn't Know

But of course, you knew all of that, because you're here—reading the newsletter on the CTA website. What you really want is some new information you can use, right? And THC wants to give that to you, so read on. This is a nonchalant, less-than-fully-authorized account from a THC architectural historian of common pitfalls of project submittals and how you might be able to help your projects get through the process a little more smoothly.

THC staff sees a lot of projects; some come in over and over again under different names and with different federal agencies attached. Using our best institutional knowledge and professional expertise, we try to sort these out and get them to the right people for review. Our jobs are made vastly more difficult by the high number of projects we receive that don't have some basic, critical information.

Authority?

First and foremost, are there any federal agencies involved (or will there be at some point during the project), with licenses, permits, funds, or property? Think hard. Use your own best institutional knowledge and professional expertise. Corps permits, even "Nationwides" are...permits. Does the project cross federal property? Did you hear someone at the last client meeting mention seeking a grant from a state or federal agency? All of these questions affect how THC reviews the project, and if you can give us the whole picture upfront, we might not have as many follow-up questions. You might also avoid having to tell your client you have to go back out into the field to do a new survey because you only did archeological work the first time around. If this seems confusing, please look at our [website](#) to learn more about the differences between Antiquities Code and Section 106.

Illustrate and Demonstrate

Once we know under which authority we're reviewing the project—strictly state or with some federal trigger(s), we need to understand the nature of the project. Ideally, you talked to us before you submitted the project to establish an Area of Potential Effect (APE) and maybe even a survey methodology. If you did not do this, we hope you used some established standards, such as Texas Department of Transportation's Standard Operating Procedures, Federal Communications Commission's Nationwide Programmatic Agreement, or something similar. THC staff met with consultants a few years ago to come up with APE guidelines, and the table on the next page includes some of our suggestions, but please use your best professional judgment. If your suggested APE is reasonable, we will most likely agree with you. We are not interested in reinventing any wheels, and we want your clients' projects to sail through our stacks just as much as you do.

Assuming the project APE is appropriate, THC now needs to know what the project is, where it will be, and whether or not there are any historic properties that might be affected. If there are no federal triggers for Section 106, we want to know if there are any direct impacts to SAL properties,

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those already designated as such or anything already NRHP listed. If there are federal triggers, please provide a good, legible map showing the suggested APE. Even better, show the project, historic resources, and vantage points for all of your fine photo taking on the same map so we can have evidence of all of your hard work! This will also convey a concentration of historic resources (or lack thereof) relative to the project. Please use your best judgment about what kind of information you might need to see if you were thinking about the project without ever having been on site. Photos, renderings, descriptions—all of which are clear, concise, legible—go a long way toward informing our staff of the situation, and the sooner we can understand why we are looking at something and what that something is, the sooner we can move on to the next project.

Have Patience

Don't be in such a hurry, have faith, keep your fingers crossed, and other such axioms. We know. Your client wants this resolved, like, three weeks ago. You hate to call us to find out the status, request a rush, or otherwise admit that either your client doesn't understand how this works, or maybe you didn't quite budget well for the time. We get it. Sometimes we are the ones making the awkward call letting you know that we

are running late, but I know we all try our hardest to get projects reviewed as quickly as we can, just as I know you try your best to get us the information we need. We want you to be in your client's good favor, and we don't want to make mountains out of molehills. We want to be sure, though, that we are all doing our job to the best of our abilities.

In addition to trying to get to your project with great haste, we are also moving toward accepting electronic files more readily. In the near future, you may be able to check your project status online. Shortly after that, you might be able to submit all of the project review materials to us and get responses back online. Keep those fingers crossed. In the meantime, remember, we just want to help identify and protect the state's historic and cultural resources, which is why we're all here together to begin with, isn't it? Just let us know if you have any questions. Our website has [reviewer contact information](http://www.thc.state.tx.us/contact#contact_proj_review) on it (http://www.thc.state.tx.us/contact#contact_proj_review), but you can also email me and I'll try to help get your question to the right person: linda.henderson@thc.state.tx.us.

**Linda Henderson is the THC's liaison to TxDOT for non-archeological historic properties. She has been with THC since 1997 and has been a project reviewer since 2006.*

Suggested Starting Points for Determining				
Area of Potential Effects (APE)*				
Project Type...	i.e., ...	Possible Indirect Effects	Other considerations	Possible APE
Earth-moving	Strip mines, new reservoirs, etc.	Auditory, vibratory, visual, Atmospheric	Cumulative	Adjacent parcels, Noise contours
Linear infrastructure	pipelines, irrigation	Visual, vibratory	Cumulative	Adjacent parcels
Linear transportation	roads, sidewalks, rail, runways	Visual, auditory, vibratory	Elevated facilities may need larger APE for visual impacts	TxDOT standards, Noise contours
Vertical	towers, wind and solar arrays, transmission lines	Visual, auditory, vibratory, atmospheric	Vegetation, terrain	FCC standards, Noise contours
*APEs per Section 106 cover direct and indirect effects. Under Texas Antiquities Code, only direct effects are considered.				
This table is just a starting point! APEs should be based on specific project and site conditions.				

October 1, 2013

Mr. David Lyle, CEO
National Geographic Channel
Communications Department
1145 17th Street
N.W. Washington, D.C. 20036-4688

Dear Mr. Lyle,

On behalf of the Council of Texas Archeologists (CTA), I am writing to express our deep displeasure regarding your program *Diggers*. It is disturbing that the National Geographic Channel, which is a brand people associate with sound science in general, would air a program wherein characters celebrate artifact finds with adolescent fist-pumps and no concern whatsoever about the damage their uncontrolled digging inflicts on real archaeological sites. Such blatant treasure-hunting would never meet any possible standard of good science.

This program is sending the wrong message to your viewers, and in the process it misrepresents what archaeology is all about. Your show sends the following messages:

It promotes the idea that our history is for sale to anyone with a shovel, backhoe or metal detector.

It promotes the idea that artifacts are mere trinkets and have value as commodities that can be sold for profit.

The show sends the message that digging for buried "treasure" is a sport wherein damage done to archaeological sites is immaterial.

And finally it trivializes authentic archaeological and historical investigations through its portrayal of uncontrolled excavations and collection at known sites.


Archaeological sites, including prehistoric sites, historic battlefields and forts are fragile resources that enhance scholarly inquiry into the past. But these sites are finite; once they are excavated or damaged, they cannot be put back, and the past is lost forever. Unlike trees, archaeological sites do not regenerate. This is why the science of archaeology is methodologically detailed and meticulous. The images of your *Diggers* ripping artifacts out of the ground sadden us.

We realize that when private landowners give permission to dig up an archaeological site, your *Diggers* are not breaking any law. However, they are undermining the preservation ethics our discipline strives to promote for our nation's heritage. We believe that the National Geographic brand should not participate in making celebrities of individuals who have little respect for history beyond making money from its material remains.

We urge you to pull this show off the air, or at least to consider restructuring its message, particularly in the way it represents artifacts as treasure. This type of artifact commodification in particular, does the greatest disservice to other archaeological resources, for which protection is tenuous at best.

The CTA appreciates your careful consideration of the points we have raised.

Sincerely,



Rachel Feit, President
Council of Texas Archeologists.

RF/JH

Spring 2013 Meeting Minutes

CTA Spring 2013 Meeting March 22, 2013 Camp Mabry Building 8, Austin, Texas

Registration started at 9 am. The meeting was called to order at 9:36 am.

Announcements:

The membership was reminded to stay around for the papers and the social. No other announcements were made.

Approval of Minutes:

The first order of business was to approve the minutes from the Fall 2012 meeting that was published in the Spring 2013 Newsletter. A motion was made for approval of the minutes, and was seconded. The membership voted and approved the minutes.

Officer Reports:

President (Rachel Feit): President, Rachel Feit, had not much to report. Rachel stated that things were going well.

Past President (Mary Jo Galindo): Past President, Mary Jo Galindo, also had nothing to report. Mary Jo mentioned that there was to be a mention of the Archaeology Channel in later business.

Secretary (Kristi Miller Nichols): Kristi reminded everyone that memberships are on yearly basis from January to December, so your 2012 membership expired on December 31, 2013. Currently we have 2 student members, 62 professional members, and 23 contractors who have renewed or recently joined CTA for the 2013 year. You can pay online via PayPal through the CTA website (www.counciloftexasarcheologists.org) or by completing a membership renewal form (also on our website) and mailing it with a check to Council of Texas Archeologists c/o Kristi Ulrich, Center for Archaeological Research, The University of Texas at San Antonio, One UTSA Circle, San Antonio, TX 78249. Please review our membership fees, as contractor's fees have changed for the 2013 year.

Also, please take a moment to join the CTA_org

Yahoo! Group. All notices to the CTA membership are posted to this email list and this is our main way of communicating with the CTA membership. If you are not currently on this list, please forward your current email address to Mindy Bonine at ebony2071@yahoo.com and she will see that you are added to the list server.

Newsletter Editor (Mindy Bonine): Newsletter Editor, Mindy Bonine, noted that there were not a lot of announcements, so she reiterated the option for the membership to use the website for anything that comes up. Announcements can be anything from field schools, book announcements, etc. People read the website and it's a great resource to get your announcements out to the public.

Treasurer (Carole Leezer): Carole has included the proposed budget in the newsletter. At the time of the newsletter the checking account had \$7,049.86. The money market account had \$18,899.97. The scholarship fund had \$8,763.02. Carole thanked Nancy Kenmotsu for her donations to the scholarship fund.

Standing Committee Reports:

Auditing (Mark Denton): Mark Denton noted that everything was in order with finances. The bank accounts were doing great. The Committee agreed with the Treasurer to up some donations.

Communications (Mindy Bonine): Mindy Bonine reported that the Akismet is live. She has activated the post and response capacity of the website. You are now able to post responses on the CTA website. The Akismet has caught 240 spams during the two weeks that it was up. Currently if you wish to post on any page there is a box on the bottom that you are able to enter your comment. To enter a comment, you must include your email in the appropriate box. The comment does not get posted right away. Mindy will be notified for approval of your comment. After you are approved once, you are approved as a commenter from then on. She expects professional decorum on our site and will remove unprofessional comments. There will be an initial warning after the first offense of unprofessional behavior, but if it continues Mindy will remove all comments

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from the individual. This will be an interactive running commentary from the membership. It can be an active discussion, but it needs to remain professional. The only way of knowing if a comment is approved, or a comment is present, is to check the site. The rules for the comment sections will be modified if needed.

Contractors List (Shelly Fishbeck): Shelly Fishbeck was not present at the meeting. Carole Leezer spoke on her behalf. Shelly wished to remind all contractors that if you do not pay up by May 1, 2013 you will be removed from the Contractors List. Shelly will be away during the summer and will be unable to make changes during that time.

Curation (Laura Nightengale): Laura Nightengale was not present at the meeting. Carolyn Spock spoke on her behalf. She stated that the committee had nothing to report.

Government Affairs (Nesta Anderson): Mary Jo Galindo and Andrea Stahman Burden spoke on her behalf. The Committee is following several bills. Some bills are getting more attention than others. They were following the health and safety code language although the bill was put to the side. These bills were discussed during the meeting:

➡ House Bill 1472: The committee is watching this bill to see if the health and safety code will be amended for statutory probate courts (which would mean special courts for special probates).

➡ House Bill 941: This bill focused on tribal collaboration. There would be no fiscal impact, so no agencies were able to comment on the bill. The bill excludes non-recognized tribal groups. It would only affect federally recognized tribes in Texas. The bill affects all state agencies.

➡ Senate Bill 881: This bill deals with access to confidential material after 75 years. This bill would exempt state archaeologists and their right to keep site locations confidential.

➡ House Bill 36: Andrea spoke about this bill. The bill would allow for a criminal penalty for graffiti. The bill, if passed, would make parents of minors responsible for restitution and repair. The bill would cover both historic and prehistoric resources.

➡ House Bill 174: This bill was about creating an American Indian Heritage Day.

➡ House Bill 2205: The bill focused on the establishment of Alamo Historic District Commission.

➡ Senate Bill 111: This bill was concerned about the Texas historical buildings use. The bill would also look at registered historic landmark designations. At the time of the meeting, the bill was in the House.

Mark Denton spoke that Senate Bill 615 was also causing excitement. The bill, if passed, would change the existing language of Chapter 442. This would allow the Historical Commission to farm out any of its functions to other agencies. The language added that is causing a stir is "Or individual including for-profit." Mark Wolfe said he wasn't worried about it, but others thought it may be another attack on THC. No one at THC is worried and does not think it is related to dissolving the agency. Senate will vote on their version of the bill. The THC is being assured that the abolishment of THC is not the intent of the bill. The bill will reduce the number of commissioners (From 17 to 9). The question is: Will it affect operational integrity of agency? It has been explained that this is a cost saving measure, and the bill opens the door for more public-private collaboration.

Multicultural Relations (Mary Jo Galindo): Mary Jo needed to postpone the committee report until later in the meeting.

Public Education (David Brown): David Brown announced that there was no nominee for the Mott Davis award. No one was nominated and no project was found that met the requirements. The number of projects that include public education has diminished in the last few years. David is currently tracking a few projects for next year. Please continue to remember public education as a part of your projects.

Nominating Committee (Bill Martin): Bill Martin reported that he found a candidate to nominate for the position of President.

Special Committee Reports:

Academic Archeology and CRM (John Johse): Jon Lohse reported that CAS has been talking

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with TxDOT about education sessions. These sessions were to provide access to advancements in methods and techniques, and well as theoretical shifts in the discipline. He was hoping that an arrangement can be finalized so the sessions may start at the end of this year. CAS may work on doing it on its own if TxDOT cannot get it ready by this year.

Seminars will include topics covering chronology, radiocarbon dating, presentations that discuss sample selections and what samples to send and who to use, and how to use data to create a tighter chronology. GIS, curation, geoarchaeology, and ceramics are other topics that people may want to be made into seminars.

Multicultural Relations Revisit: At this point in the meeting Margaret Howard spoke about the committee, which has three sub-committees. She wanted to let the membership know that there are donation opportunities. In addition, she asked to change up CTA's donation strategy. Marie Archambault noted that the committee has funded over 80 scholarships. These scholarships are working to increase the diversity of the field schools. Without the scholarships many tribe members would not be there. Scholarships are essential to the program. Leslie Bush, speaking on behalf of Tim Sullivan, noted that the collegiate scholarship helped to fund field school participants. These scholarships have produced some all-stars. The scholarships can help direct well qualified individuals into the field and help others to determine if this is the right direction. The recipients could use money to present at the TAS Conference, as well as attend field schools and academies. The Committee asked to augment the current contribution from CTA from \$1500 to \$2100 to split between the three committees. The committee will revisit this request during the budget discussion.

Nedra Lee spoke about a PhD student at UTA. Diversity scholarship provides fund for students and minority groups to help students attend archaeological opportunities. Twelve scholarships were given to students of an ethnic minority to attend field schools and academies. Nedra stated she was one individual who had directly benefited from the scholarship. She originally had no intent of pursuing Texas Archaeology as her area of study. With the scholarship she was able to attend the San Saba field school. This was her first

exposure to Texas Archaeology and archaeological investigations. Due to the participation in the field school, she has been pursuing Texas Archaeological subjects now.

History Committee (Doug Boyd): Doug Boyd was not present, therefore there was nothing to present.

Membership Committee (Becky Shelton): Alan Skinner spoke on behalf of Becky Shelton. They will present the award for student research during the new business.

Anti-Looting (Jeffery Hanson): Jeffery Hanson had nothing much to report. The Forrest Phen Lawsuit was dropped, although he is not sure why. He is looking into the information.

Agency Reports:

THC (Mark Denton and Pat Mercado-Allinger): The THC website has a new look. The THC has the ability to do editing, so the changes will happen more quickly. The membership was requested to let them know if there are changes that need to be made. Concerning TAAM, THC is in the same situation as last year, as staffing is at the same level. The TAAM Calendar will be online, and there will be a new poster. Two exhibitions will be at the Bob Bullock Museum. One is a revamped core exhibit with a reconstructed hall. The other will be the special exhibit hall which will house the traveling exhibit.

Concerning marine archaeology, project sponsors are contacting Pat for information. As a state agency they cannot recommend agencies to perform the work. The issue of data needed for marine sites will be visited at the fall meeting. Guidelines for marine sites will be discussed.

SAA is returning to Austin in April of 2014. The Downtown Hilton will be the host hotel. The THC asked for help in identifying ideas for Tours. The Travis County Archaeological Society will host the 2014 TAS Annual Meeting in the Austin area. Carolyn Spock is looking into details and starting the planning. More information will come over the next months.

The budgetary process in the legislature was discussed. The Senate budget is being voted on, but the House budget is still being worked on. The

(Continued on page 16)

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situation is better than it was two years ago, but expecting operations will not come out of the Preservation Trust Fund. This will allow for building up the Trust Fund to be able to give out grants again. There are still going to be cuts, but it looks better. The process is moving fast.

Concerning rules, the THC has been undergoing a systematic reviewing and rewriting of rules. The big pieces that were changed are Chapters 25 and 26. Chapter 25 was outdated, and needed many changes. Chapter 26 is the Antiquities Code. The revisions have been posted. There are big changes in Chapter 26. The original was disorganized. There will be changes to definitions of terms to reflect the current terminology. The biggest changes are in the architectural component. A State Archaeological Landmark is changed to State Antiquities Landmark to encompass architectural features. There is a 30 day public review that started on March 1. They are adhering to that period to address the comments, possibly on April 25 or 26. No archaeological comments as of today, and there are only two architectural comments.

TPWD (Michael Strutt): Michael Strutt spoke on behalf of TPWD. There had been a discussion of closing parks due to the budget. At this time it does not look like that closing parks is going to happen. There will be closing of department offices instead and the loss of a few positions. The 1993 bill that put a tax on sporting goods sales was supposed to be going to TPWD. They are still watching to see how the revenue is going to be used in the future. In 1993, there was a cap on the revenue to go to Parks. TPWD is seeing if cap will be removed.

Michael spoke about third party projects. When you have a project that crosses Parks property, you need to contact parks to get the cultural resource requirements. Be aware that TPWD may require more work than minimum standards, so budget appropriately. THC will not issue a permit unless Parks has signed off on the forms. TPWD will handle curation of cultural material recovered on Park property from these third party projects. Stop projects if you are nearing TPWD land and you do not have clear understanding that third party has dealt with TPWD. Arrangements need to be made upfront.

TxDOT (Scott Pletka): Scott Pletka spoke on be-

half of TxDOT. Scott first spoke about staffing. They had lots of people on leave...not all were planned. Barbara Hickman is out on leave. Contact Scott if you need assistance from her. Al McGraw retired in August. His position has been filled by Eric Oksanen. John Arn is retiring. His last day will be March 28. TxDOT will fill that position. The position was open for applications at time of the meeting.

TxDOT-THC MOU has been revised. The changes are in terms of style and organization. One main thing is that a language change was made to parallel Section 106. This helps to make sure that all aspects are covered. The impact evaluation has gone away and has been replaced by a reconnaissance survey. There is also an expanded list of project types and elements that do not require collaboration with THC for minor projects. Another change in the MOU is about cemeteries. This concerns when and where investigations need to occur near a known cemetery. ROW policies have been revised. The new standards will be applied to all other cemetery investigations. There was also a change to TxDOT-THC MOU concerning the treatment of isolated cisterns.

Legislation that will affect TxDOT is the NEPA delegation. When that happens the approval authority will be delegated to TxDOT. TxDOT will be on its own if it gets sued over issues concerning NEPA.

Michael noted there was a difference in the TxDOT-THC MOU from the TPWD-THC MOU. In the TxDOT-THC MOU, TxDOT applies for a permit directly to the THC if there is going to be work in TxDOT ROW.

Other news from TxDOT included four new general service contracts that were awarded. TxDOT is also still working on the modeling effort to make the Atlas more robust. Anticipate a RFP for someone with GIS expertise. Within the next 6-9 months there will be a lot of work in the department. TxDOT will be very busy.

TARL (Jonathan Jarvis): Jonathan Jarvis spoke on behalf of TARL. He promised to continue to badger you for GIS data and shape files.

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Old Business:

Akismet is up and running, and that piece of business is concluded.

Zak Selden, recipient of a CTA grant, must publish or present to the CTA as part of his obligations. This will be organized.

Five \$500 grants were awarded for TAAM. Three of the recipients published updates. CTA is still waiting on the other two.

New Business:

Carole Leezer presented the new proposed Budget for 2013. She wanted everyone to note the increase in contractors fees. Hopefully this will provide a little extra money to play with. Three new lines were added to the budget: 1) SAA Table: \$500 for table. We hope to split a table with TAS; 2) Due to increased income she proposed to increase the student grant; 3) Archeology Channel membership: \$500 for sponsorship level.

Carole was not sure about funding the Archeology Channel and was leaning toward increasing the scholarship, or making two scholarships. John Arn made a motion to strike the Archaeology Channel line and relocate the money to education. The motion was seconded. A discussion ensued concerning the potential of increasing the student grants. Should the extra money go to one student, or should two grants be given?

Pat Mercado suggested a friendly amendment to strike the Archaeology Channel line item. The motion was seconded seconded. Membership voted and approved the removal of the Archaeology Channel membership.

John Lohse made a motion to create a second student grant. In addition, he suggested to increase the student scholarship to two \$1200 scholarships. The motioned was seconded. Membership voted on the motion, and the motion carried. Mark Denton made a motion to combine the rollover from this year to pay for the two scholarship grants for 2014. The motion was seconded. The membership voted on the motion and it carried.

Margaret Howard made a motion to increase the TAS Native American donation to \$2100, and

change the line to TAS Multicultural Program. The motion was seconded, voted on, and carried.

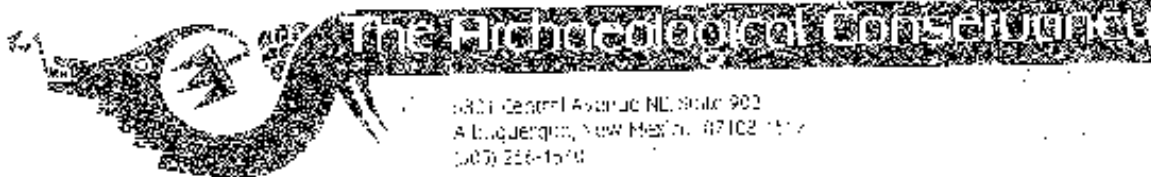
Rachel called for a motion to approve the budget as amended. The motion was seconded. Membership voted and approved the 2013 Budget.

Nominations for the next CTA president were presented by Bill Martin. Bill Martin nominated Missi Green. Mark Denton moved for nominations to cease. The motion was seconded. Membership voted on Missi Green's nomination. Missi was elected as the next CTA President.

Recipient of the student scholarship was Sarah Loftus. Sarah Loftus is a doctoral student at Syracuse University, New York working on her dissertation, which is on post-emancipation African American experiences in rural areas previously dominated by antebellum plantation agriculture. Her dissertation field work and research is focused on the Benjamin Jackson Plantation in Anderson County, Texas. She has her BA from the University of Houston, and has worked at the Levi Jordan Plantation. She has worked in CRM in Texas, where her focus has been on historical archaeology.

Jon Lohse discussed the limit on terms for president. He suggested an amendment to the bylaws to allow a president to serve more than one consecutive term. Pat Mercado-Allinger made a motion to form an ad hoc committee to investigate the issues. The motion was seconded. Jon Lohse, John Arn, Carolyn Spock, Bill Martin will compose the committee. Jon Lohse became the committee chair. They would discuss their findings at the next meetings.

There was a motion on the floor to adjourn the meeting. The motion was seconded. The vote was in favor of adjourning the meeting. The meeting was adjourned at 12:22 pm.



June 24, 2013

Ms. Carol Leezer
 Council of Texas Archeologists
 Center for Archaeological Studies
 One CISTA Circle
 San Antonio, TX 78249

Dear Ms. Leezer,

Thank you for your generous gift of \$500.00 to support The Archaeological Conservancy's Preservation Fund. Your contribution will provide us with the essential resources to continue to identify, acquire, stabilize, and preserve the most significant archaeological sites in the United States.

In addition to the more than 450 sites we've protected in the last 33 years, we are always working on the acquisition and permanent preservation of many more. Right now, we are working on the preservation of a 10,000 year-old-cave in Idaho where large game was hunted and processed and a Teicapan pueblo occupied between about A.D. 1500 and 1650 in New Mexico. And our regional directors are always working closely with landowners to secure the permanent protection of many other endangered sites throughout the country.

Again, thank you for your support and generosity. We truly appreciate your continuing commitment to preserving America's rich cultural heritage. It is because of members like you that we are able to continue protecting our nation's cultural treasures.

Sincerely,

Mark Michel
 President

Preserving the Past for the Future

T H A N K Y O U L E T T E R S



COLLEGE OF LIBERAL ARTS
THE UNIVERSITY OF TEXAS AT AUSTIN

*Texas Archeological Research Laboratory, 1 University Station, R0500 • Austin, TX 78712-0714
(512) 471-5860 • Fax (512) 232-6363*

Carole Teazer
Council of Texas Archeologists- C/O Kristi Nichols
Center for Archaeological Research at UTSA
One UTSA Circle
San Antonio, TX 78249-0658

Dear Carole,

I write to gratefully acknowledge receipt of the generous \$2,000 donation from the Council of Texas Archeologists to *Texas Beyond History* and express deepest appreciation for this support. In addition to supporting improvements to TBH logistics, the funds will be applied toward developing new exhibits which highlight some of the excellent archeological research being conducted in the Texas CRM world. This includes the **Ransom Williams** exhibit which, in addition to the multi-section content, will include original art, oral history video and student interactives and lessons.

I send thanks to all the members of CTA for continued support and trust in TBH.

Most sincerely,

Susan Dial, TARI, Editor, *Texas Beyond History*

T H A N K Y O U L E T T E R S



THE UNIVERSITY OF TEXAS AT AUSTIN

P.O. Box 7458 Austin, Texas 78713-8605-10122288 giv@utmsi.utexas.edu
Federal EIN (Tax ID): 29-0000003-C

May 01, 2013



Council of Texas Archaeologists
C/O Center for Archaeological Studies
501 University Drive
San Marcos, TX 78666-4594-01

Thank you for your generous gift to The University of Texas at Austin. We like to say that "What Starts Here Changes the World"—and your generous support is integral to the University's ability to see that change in motion. Our students, faculty, and staff are committed to the discovery and preservation of knowledge—advancements that benefit society now and for generations to come. On behalf of them and our entire Longhorn family, I thank you for supporting the University during its Campaign for Texas, and for joining us in the work of this great institution.

Sincerely,

William Powers, Jr.
President

GIFT DESIGNATION: Texas Archeological Research Laboratories

From: Council of Texas Archaeologists

Gift Date: 05/17/2013

Reference Number: 09714

Gift amount: \$2,000.00

Benefit amount: \$0.00

Tax-deductible amount: \$2,000.00

No goods or services were received as a benefit of this gift.

If you have any questions about this gift, call reference number 09714, please call 855-UTEXAS or email giv@utmsi@www.utexas.edu.

T H A N K Y O U L E T T E R S



COLLEGE OF LIBERAL ARTS
Office of the Dean

Shirley L. Gistman Building • 116 West Campus Dr., Stop 66010 • Austin, Texas 78712-1257
512-471-6342 • FAX 512-471-4526

May 27, 2013

Mrs. Linda W. Ellis
Council of Texas Archeologists
601 University Drive
San Marcos, TX 78666-1684-01

Dear Mrs. Ellis:

Thank you for your recent gift of \$2,000 to the Texas Beyond History Program in the College of Liberal Arts. As you know, with over fifty departments, centers, and programs, the college is the academic heart of the university. We strive to serve as a source of limitless opportunity for intellectual growth, for engaging faculty in and out of the classroom, for studying abroad, and for nearly any academic interest our students may seek to pursue.

We would not be where we are today without the support of friends like you. Your generosity enables the college to provide students with a strong foundation that emphasizes ethics, integrity, citizenship, and awareness of global issues.

Thank you for your support as we transform lives and cultivate life-long learners.

Sincerely,

Randy L. Dicht, Dean
David Braxton, Jr. Regents Chair in Liberal Arts

RLD:rag

T H A N K Y O U L E T T E R S



SUL ROSS STATE UNIVERSITY
A member of the Texas State University System
ALPINE, TEXAS 79832

The Museum of the Big Bend
Box C-101

Phone (432) 837-8143
Fax (432) 837-8601
www.sulross.edu/~muse001

October 1, 2012

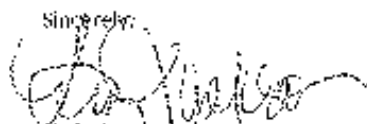
Ms. Rachel Feit
President
Council of the Texas Archeologists
c/o Center for Archaeological Studies
601 University Drive
San Marcos, Texas 78665

Dear Ms. Feit:

On behalf of the Museum of the Big Bend, I wish to thank you for accepting our application for a CTA Public Outreach Grant of \$500. Your grant will assist us in our Art-Chaerology Children's Program this fall.

Through your grant, we will be able to promote the study of Archaeology to the young people in the Big Bend region. As you know, the children's fall program will gain deeper meaning as we are running it alongside the museum's fall exhibit, "Removing the Shroud of Mystery: Archaeology in the Big Bend."

In December, at the conclusion of our fall children's programming, we will provide a report to the CTA. Again, thank you for your confidence in our programs!

Sincerely,

Liz Jackson
Director

© Institute of Service & Community Creativity

T H A N K Y O U L E T T E R S



SUL ROSS STATE UNIVERSITY

A Member of the Texas State University System
ALPINE, TEXAS 79832

Office of The President
Box U-100

Phone (432) 837-8000
Fax (432) 837-8294

October 2, 2012

Ms. Rachel Feit, President
Council of Texas Archeologists
c/o Center for Archaeological Studies
601 University Drive
San Marcos, TX 78666

Dear Ms. Feit:

On behalf of Sul Ross State University and the Museum of the Big Bend, I am grateful to you for your recent grant of \$500 to the Museum of the Big Bend Education Program in support of the museum's Art-Chaerology Children's Program. Your interest in Sul Ross and your support help to ensure our commitment in creating high quality, engaging educational opportunities for area youth that weaves a sense of discovery and archeological exploration into the history, culture, and heritage of the Big Bend Region.

Again, thank you! Current and future generations will benefit from the Museum Education Program as it encourages an interest in archeology and in learning that will last a lifetime. Your support for the Museum of the Big Bend has made it a source of distinctiveness that sets Sul Ross State University apart in our endeavors as an educational institution and a partner in the community and region. We appreciate your investment in the Museum of the Big Bend Education Program and look forward to the opportunities it brings for learning, exploration and discovery. My best wishes to you.

Sincerely,

Ricardo Maestas, Ph.D.
President

Enclosure

cc: Ms. Elizabeth Jackson

A heritage of service. A commitment to quality.

T H A N K Y O U L E T T E R S

TEXAS
ARCHEOLOGICAL
SOCIETY
INCORPORATED 1934
 One UTSA Circle
 Center for Archeological Research
 San Antonio, Texas 78249-2628

May 16, 2013

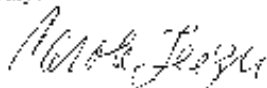
Kristi Nichols
 Council of Texas Archeologists
 CAR/UTSA
 One UTSA Circle
 San Antonio, TX 78249

Dear Council of Texas Archeologists,

On behalf of president Waide Troell and the Board of Directors, thank you for your generous gift of two thousand and one hundred dollars (\$2100) for the TAS Multicultural Program. The Texas Archeological Society is a 501-c-3 non-profit educational organization and your donation is tax deductible. We are sincerely grateful.

This donation was received in May 2013 and no goods or services were provided in exchange for the donation.

Yours truly,



Carol A. Leezer,
 Assistant Administrative Director

:csd
 cc: Marybeth Tomka, Treasurer

www.tasociety.org
 tas@tasociety.org

T H A N K Y O U L E T T E R S

9/5/13

Council of Texas Archeologists
2011-2012 Budget and Actual and Proposed 2014 Budget
(Budgets follow calendar year)

	2011 Budget	2011 Actual	2012 Budget	2012 Actual	Proposed 2014 Budget
INCOME					
Individual Memberships (135-\$30 + 17-\$15)	\$ 4,770.00	\$ 4,110.00	\$ 4,200.00	\$ 4,275.00	\$ 4,200.00
Student Memberships (13-\$15)	\$ 250.00	\$ 150.00	\$ 150.00	\$ 195.00	\$ 150.00
Contractor Listing Fees (59)	\$ 5,500.00	\$ 6,000.00	\$ 6,000.00	\$ 5,900.00	\$ 7,500.00 (60 @ \$125)
Individual Membership PayPal Fees (75-\$1.00)	\$ 75.00	\$ 79.00	\$ 80.00	\$ 75.00	\$ 75.00
Student Membership PayPal Fees(8-\$1.00)	\$ 5.00	\$ 4.00	\$ 4.00	\$ 8.00	\$ 5.00
Contractor Listing PayPal Fees (28-\$4.00)	\$ 100.00	\$ 104.00	\$ 100.00	\$ 112.00	\$ 100.00
Checking Interest	\$ 2.00	\$ 1.56	\$ 1.50	\$ 1.37	\$ 1.35
Money Market Interest	\$ 10.00	\$ 4.32	\$ 4.00	\$ 3.97	\$ 3.75
Scholarship Fund Interest (\$3.25)/ Donations (\$106)	\$ 100.00	\$ 95.08	\$ 100.00	\$ 109.25	\$ 100.00
Social Donations		\$ 112.00			
Other (Late fees)		\$ 284.00		\$ 128.00	\$ 100.00
Contractor Fall Social Food Paymt		\$ 1,361.25			
		\$ 275.00			
TOTAL INCOME	\$ 10,812.00	\$ 12,580.21	\$ 10,639.50	\$ 10,807.59	\$ 12,235.10
GENERAL EXPENDITURES					
Administrative Costs (2011 expenses: return ck \$30, charge back \$12,)	\$ 200.00	\$ 42.00	\$ 100.00	\$ -	\$ 50.00
Web Page Registration (bi-annual fee)	\$ 125.00	\$ 115.50	\$ 60.00	\$ -	\$ 60.00
Spring Meeting/Social Expenses	\$ 800.00	\$ 777.00	\$ 800.00	\$ 797.03	\$ 800.00
Fall TAS/CTA Social	\$ 525.00	\$ 725.00	\$ 525.00	\$ 525.00	\$ 525.00
Contractor Sponsored Catering		\$ 1,361.25			
PayPal Fees	\$ 150.00	\$ 194.00	\$ 194.00	\$ 152.39	\$ 175.00
Executive Committee Expenditures		\$ 200.00	\$ 300.00	\$ -	\$ 300.00
TOTAL GENERAL EXPENDITURES	\$ 1,800.00	\$ 3,414.75	\$ 1,979.00	\$ 1,474.42	\$ 1,910.00
COMMITTEE EXPENDITURES					
Curation Committee	\$ 50.00	\$ 0.00	\$ 50.00	\$ -	\$ 50.00
Governmental Affairs	\$ 100.00	\$ 43.50	\$ 100.00	\$ -	\$ 100.00
Membership	\$ 200.00	\$ 0.00	\$ 100.00	\$ -	\$ 100.00
Multicultural Relations	\$ 50.00	\$ 0.00	\$ 50.00	\$ -	\$ 50.00
Public Education	\$ 100.00	\$ 0.00	\$ 100.00	\$ 77.83	\$ 100.00
General Committee Expenses	\$ 50.00	\$ 0.00	\$ 50.00	\$ -	\$ 50.00
TOTAL COMMITTEE EXPENDITURES	\$ 550.00	\$ 43.50	\$ 450.00	\$ 77.83	\$ 450.00
DONATIONS					
Archeological Conservancy	\$ 500.00	\$ 500.00	\$ 500.00	\$ 500.00	\$ 500.00
CTA Scholarship Grant	\$ 750.00	\$ 750.00	\$ 1,000.00	\$ 1,000.00	\$ 2,400.00 2 @ \$1200
TAAM Event Grants (divided among 5 applicants)	\$ 1,500.00	\$ 1,500.00	\$ 2,500.00	\$ 2,500.00	\$ 2,500.00
TAS Donors Fund	\$ 300.00	\$ 300.00	\$ 300.00	\$ 300.00	\$ 300.00
Texas Beyond History	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00
TAS Multicultural Program	\$ 1,500.00	\$ 1,500.00	\$ 1,500.00	\$ 1,500.00	\$ 1,500.00
TOTAL DONATIONS	\$ 6,550.00	\$ 6,550.00	\$ 7,800.00	\$ 7,800.00	\$ 9,200.00
TOTAL EXPENDITURES	\$ 8,900.00	\$ 10,008.25	\$ 10,229.00	\$ 9,352.25	\$ 11,560.00
OVERALL BALANCE	\$ 1,912.00	\$ 2,571.96	\$ 410.50	\$ 1,455.34	\$ 675.10

P R O P O S E D 2 0 1 4 B U D G E T

2013 CTA Membership List
(As of September 2013)

Any questions or corrections, please contact Kristi at kristi.ulrich@utsa.edu

Abbott, Jim	Hatten, Patrick	Nickels, David
Acuña, Laura	Held, Pollyanna	Nightengale, Laura
Anthony, Dana	Hise, Nicki	Nuncio, Katrina
Archambeault, Marie	Howard, Margaret	Osburn, Tiffany
Athens, William	Howe, Mark	Owens, Jesse
Barry, Chris	Huebchen, Karl	Perez, Heather
Beachman, Brad	Hughes, Jean	Perttula, Tim
Beck, Abigail P.	Hughey, James	Peyton, Abby
Beck, Chase	Jacobson, Jodi	Prewitt, Elton
Black, Deidra	Jarvis, Jonathan H.	Prikryl, Daniel
Bonine, Mindy	Jones, Bradford	Quigg, Mike
Boyd, Doug	Julien, Dan	Ralph, Ron
Bowman, R. Doyle	Karbula, James	Roberts, Jerod
Bradle, Michael	Katz, Paul	Rush, Haley
Brownlow, Russell	Keller, John E.	Sanders, Calvin
Bundy, Paul	Kelly, Jennifer	Schroeder, Eric
Burden, Andi	Kenmotsu, Nancy	Scott, Ann
Bush, Leslie	Kibler, Karl	Scott, Tony
Butler, Todd	Klinger, Timothy	Schubert, Darren
Cason, Samuel	Krivor, Michael	Shafer, Harry
Chavez, Michael	Laurence, Sara	Shipp, Julie
Clark, Reign	Lawrence, Ken	Skinner, Alan
Cockrell, Brian	Leezer, Carole	Sloan, Katie
Cody, Mercedes	Lintz, Christopher	Soltysiak, Kristi
Cole, Sarah M.	Loftus, Sarah	Speer, Charles
Cruse, Meg	Lohse, Jon	Spock, Carolyn
Darnell, Craig	Luther, Joseph	Stone, Kevin
Davis, Cody	Mahoney, Richard	Sundborg, Gregory
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Toward an Actualistic Petrofacies Model for the Angelina River Basin in East Texas

By

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INTRODUCTION

Ceramic provenance studies form the basis of worldwide archaeological research, and petrofacies models have expanded the scope of research designs aimed at reconstructing exchange networks (Stark and Heidke 1998), exploring social boundaries (Stark et al. 2000), social interactions (Miksa and Heidke 2001), and ceramic economy (Abbot et al. 2007). Due to the vagaries of Texas geology, traditional geochemical and mineralogical techniques (instrumental neutron activation analysis [INAA], laser ablation inductively coupled plasma mass spectrometry, and petrography) have not achieved the degree of success in Texas as within other regions. Research focused upon ceramic provenance has received considerable treatment in the literature for East Texas to include studies employing Instrumental Neutron Activation Analysis (INAA), laser ablation inductively coupled plasma mass spectrometry (LA-ICP-MS), and petrography ((Cogswell et al. 2005; Cogswell et al. 2004; Descantes et al. 2005, 2007; Ferguson and Glascock 2008a, 2008b, 2009a, 2009b, 2010a, 2010b; Iruegas 1999; Neff 2002, 2009; Neff and Glascock 2005; Perttula 1995, 1999, 2000a, 2003, 2010, Perttula and Rogers 2007; Reese-Taylor 1993,1995; Rogers and Perttula 2004; Perttula and Selden 2013Skokan and Perttula 1998, Skokan-Switek 1997a, 1997b), but the high-definition of the petrofacies model could provide the resolution needed to enhance current and future archaeological dialogues.

In archaeological application, petrofacies can be thought of as “temper resource procurement zones whose sand compositions are distinct from one another at a relevant scale of investigation” (Miksa et al. 2004). Petrofacies models have been employed successfully in archaeological contexts of the San Pedro Valley (Miksa et al. 2004), Tonto basin (Miksa and Heidke 2001, Stark and Heidke 1998), Tucson basin (Lombard 1987, Miksa et al. 2004), Perry Mesa and Agua Fria (Castro-Reino 2004), Tanque Verde Wash (Lavayen 2011), and the Gila and Phoenix basins (Miksa et al. 2004), but this technique has not been exported east of Arizona. Through employment of this modified method that illustrates the spatial and temporal dynamics of ceramic artifacts within East Texas, archaeologists can continue to ask increasingly complex questions of prehistoric ceramic sherds and vessels. The three-dimensional nature of ceramic provenance (x = longitude, y = latitude, z = time) adds to the complexity and value of the research. Data resulting from the construction of an actualistic petrofacies model in East Texas will provide the necessary foundation for archaeologists to begin expanding upon the current dialogue regarding the provenance of ceramic vessels utilized by the prehistoric Woodland and Caddo populations. This proposal represents the final piece of a three-phase endeavor to synthesize data, employ contemporary analytical methods to search for trends at the macro level, and provide a meaningful contribution to East Texas archaeology through a discussion of regional propensities.

The lower Angelina River basin in East Texas provides an ideal locality for a test of the petrofacies model within a prehistoric coastal environment. While INAA has been successful at demarcating between local and non-local ceramics at the regional scale (see Ferguson and Glascock 2012), the lack of systematic sampling for raw materials and the apparent homogeneous chemical signatures within the data have led to challenges with interpretations. Although somewhat homogenous at the elemental scale, the geologic variability within the lower Angelina River basin is ample, and provides promise for an increase in resolution for ceramic provenance. Latitudinal variability occurs at a higher frequency than its longitudinal counterpart due wholly to the nature of the coastal geology in which deep sands were deposited incrementally as sea level dropped. Although longitudinal homogeneity in the prehistoric

coastline could be seen as a limiting factor, sand samples collected within the peripheral drainages could reveal that the petrofacies identifications defined within the Angelina River basin can be exported for use in the neighboring Neches and Sabine River basins due to similarities in longitudinal geologic composition. Though the latter issue lies beyond the scope of this endeavor, testing the petrofacies model created for the Angelina River basin with sand samples from adjacent river basins fits well within the logical evolution of this research program.

THE WOODLAND AND CADDO OF THE ANGELINA RIVER BASIN

This project endeavors to develop and test a model of petrofacies for the lower Angelina River basin in East Texas. The temporal period of interest lies within two divisions, namely Woodland and Caddo, the former ranging from 500 B.C.-A.D. 800 and the latter represented by four subdivisions: Formative Caddo (A.D. 800-1000), Early Caddo (A.D. 1000-1200), Middle Caddo (A.D. 1200-1400), and Late Caddo (A.D. 1400-1680). Recent difficulties in INAA research have made it challenging to locate areas of ceramic production (see Perttula and Ferguson 2010; Selden 2013a, 2013b); however, the elevated degree of geologic variability in the lower Angelina River (Figure 2) makes it an ideal location to explore the viability of the method.

Ceramic provenance is of particular import within the lower Angelina River, due to its location along the southern border of the Caddo homeland. The region has not been well-explored as local archaeological projects tend to focus less upon data-recovery than basic pedestrian and testing surveys. Within the Angelina River basin, there have been only three data recovery projects; the River Basin Surveys (Jelks 1965), Washington Square Mound site (Corbin 1984, 1985; Corbin and Hart 1998; Corbin et al. 1984; Hart 1982; Hart and Corbin 1984; Hart and Perttula 2010; Perttula 2009a), and Lake Naconiche (Perttula 2000b, 2002, 2008, 2009b). This indicates the possibility for significant returns within this case study, while – on a broader scale – this method can be expanded to include the peripheral drainage basins.

The archaeology of the Angelina River basin includes known components that range from Paleoindian through Historic, and has been explored within a variety of archaeological efforts from avocational (unpaid/volunteer) to professionals (paid). The river basin is located in East Texas, and is a tributary of the larger Neches River. For the purpose of this study, tributaries of the Angelina River will be included in the discussion, extending southward until the Angelina and Neches Rivers merge.

Within the Angelina River basin, Woodland and Caddo (ceramic-bearing) occupations are prevalent (Figure 2), and provide the cultural framework for this endeavor where plain and decorated sand-tempered ceramics of the Woodland period can be contrast to the grog and bone-tempered Caddo ceramics. The sample of ceramic sherds used employed for this project will provide the representative cross-section needed to explore variation in ceramic composition from archaeological sites across the study area.

The first large-scale survey in the Angelina River basin was conducted by Jelks (1965) as a part of the National Park Service's River Basin Surveys prior to the impoundment of Sam Rayburn Reservoir. Those efforts helped to inform the local ceramic typology (Suhm and Jelks 1962; Suhm et al. 1954), which built upon the work of Krieger (1946). Thirty new Caddo types are currently in development (Perttula et al. in prep), and those with type sites in the Angelina River basin include Bear Creek Plain, Broaddus Brushed, Burr Engraved, Deshazo Brushed-Appliqued, King Engraved, Lindsey Grooved, Nacogdoches Engraved, Naconiche Punctated,

Pineland Punctated-Incised, Pocket Park Plain, Reaveley Brushed-Incised, Spradley Brushed-Incised, Tyson Engraved, and Washington Square Paneled.

Recent developments in INAA groupings (Figure 3) illustrate the potential for provenance diversity, but issues arise when viewing the number of samples from these sites. Of the 153 sites where INAA has been employed, 104 have a sample size of five or less, and 82 have three or fewer INAA samples. While the small sample size stems from INAA being personally funded by Perttula (personal communication, 2011), the issue of statistical significance cannot be overlooked.

Due to the current state of INAA research in the Angelina River basin, the assignment of sherds to local or non-local contexts based upon geochemical results from five or fewer sherds are discounted. With the advent of 14 new ceramic types with type sites within the river basin, the complexity of ceramic assemblages has increased dramatically, and the need for a higher-resolution method of assigning ceramic provenance is great. This need can be satisfied by petrofacies, which can assist in clarifying the dynamic relationships among the new and old ceramic types found in the Angelina River basin. This method can take Woodland and Caddo ceramics beyond the framework of current attribute, chronological, and settlement analyses, thrusting them toward the more complex theoretical questions of ceramic economy, possible north-south exchange patterns, local social interactions and boundaries, and the evolution of ceramic technological organization within the river basin.

PETROFACIES IN THE LOWER ANGELINA RIVER BASIN

In order to facilitate the creation of a petrofacies for the lower Angelina River—below the northern boundary of Nacogdoches County—this study will follow a method of petrofacies development created by Lombard (1987), and revised by Miksa and Heidke (2001), which will be adapted, per the hope of Miksa and Heidke (2001:183), for use within this study.

Geology of the Angelina River Basin

The complex geology in East Texas perpendicularly intersects the course of the Angelina River, making it well suited for a model of petrofacies (Figure 1, steps A and B). Geologic formations range from the Eocene to the present (TNRIS 2012). The geology of the Angelina River basin is distinctly zoned, and constituted of highly variable geologic composition (Figure 3). Distinctions can be made on the basis of four geologic groups—Wilcox, Claiborne, Jackson, and Fleming—which, based upon data from the National Resources Conservation Service (NRCS 2012), can be broken down into 12 smaller groups based upon sediment samples collected throughout the river basin. With this degree of variability across the study area, it is expected that erosion will produce unique compositions of sand within stream sediments that appear decidedly different due to the distinct geology of each zone (see Figure 1:C, Figure 4).

Petrofacies Predictive Model

The predictive model will guide the sampling strategy, in which sands will be collected on a zone-by-zone basis (Figures 3 and 4). The model of sand composition zones was created using the Geologic Database of Texas (USGS 2007), and geologic zones identified within the study area (Figure 3). By definition, the boundaries of a petrofacies are a created construct, since abrupt changes in composition rarely occur within adjacent drainages (Miksa and Heidke 2001;

Miksa et al. 2004). Boundaries for this predictive model (see Figure 4) – dubbed Lombard Lines in the context of this project – are named for Dr. James P. Lombard who pioneered the method, and illustrate areas where divisions in sand composition zones are expected to occur (Figure 1:C1, C2 and Figure 4).

Sampling Strategy

Transportation to and from sample collection sites will occur principally through the use of kayaks due to the amount of private property in the area. The Angelina River is accessible from a large number of intersecting roads, making it possible to collect samples from numerous locations in a single day.

Departing from Lombard's (1987:97) initial "grab sample" method in which one shovelful of sand was collected from each drainage, this endeavor will employ the modified methodology put forth by Miksa and Heidke (2001:192), which was "designed to ensure that the collected sand is a random, representative sample of the stream." More samples will be collected in areas of suspected petrofacies boundaries to explore whether those manifest in the surficial geology (see Figure 4). No permits are required for the collection of geologic samples in the study area.

Sand Sample Preparation and Thin Sectioning

One-hundred and twenty five thin sections will be created for this study, along with a larger assortment of hand samples. Analysis of these materials will provide the data necessary to move forward with the creation of the Angelina River petrofacies model.

Thin sections are created to allow the analyst to define mineralogical constituents and to quantify components. To do this, each 2-3kg sand sample is split with a riffle-style sample splitter until it fits within a 30-dram vial (~130g) (Miksa et al. 2004). The sample splitter ensures random representation in the sample, protecting against sorting and settling biases (Miksa et al. 2004). While larger than the accepted sand-silt break (0.0625mm), samples are coarse enough that little information is lost (Miksa et al. 2004). The resulting samples are dried in an oven. The split continues until samples reach a size appropriate for thin-section preparation (25g or ~1 tablespoon) (Miksa et al. 2004). The remainder is retained for use as a hand sample, and any unwashed sand is saved and stored in write-on sample bags. To prepare thin-sections, sand samples are combined with epoxy and allowed to congeal in a small block. Once hardened, thin-sections can be cut, etched with hydrofluoric acid, and stained for potassium and calcium to make potassium feldspars and plagioclase feldspars readily identifiable (Miksa et al. 2004).

Analysis of Thin Sections

Ceramic petrography – high powered microscopy using polarized light – will be employed as a check of ceramic temper assignments, and to produce point counts. Point counts are conducted by imposing an arbitrary grid atop the sample, and composition is recorded via petrographic microscope (Miksa et al. 2004). The development of point counts is rooted theoretically by Chayes (1956), and has been advanced methodologically by Ingersoll et al. (1984). Lombard (1987, 1989) modified the point count system to meet the needs of the ceramic petrographer, and includes heavy minerals due to their capacity to act as provenance indicators (Morton 1985).

Correspondence and discriminant analysis will be utilized to illustrate statistical correlations between the sand sample and the point count data. Correspondence analysis will allow for a discussion of the relationships between the sand samples and point count parameters, while discriminant analysis (with sand and sherd samples as objects, and point counts as the variable) will be used to evaluate the degree of intrapetrofacies compositional variability within the river basin, and to assign sherds to a specific petrofacies (Heidke and Miksa 1999).

Development of the Hand Sample Identification Model

Advancement of petrofacies models based upon petrographic thin sections allows rigorous quantitative treatment for problems of temper provenance; however, the application of petrographic methods to prehistoric ceramics is limited by time and fiscal constraints (Miksa and Heidke 2001). To formulate a less imposing model, hand samples for each petrofacies will be created via point count and discriminant analysis as a means to construct the descriptive key (Miksa and Heidke 2001). This will allow for petrofacies assignment by binocular microscope, which can be substantiated by point counts and statistical analyses as an assessment of accuracy (Miksa and Heidke 2001).

Hand samples, consisting of raw sands, will be created using the remainder of the sample that was originally split and cleaned to create petrographic thin-sections. These will remain within the 30-dram vial with a magnifying lid to illustrate the variability within. Classification of these samples described as one of six ordinal categories (i.e., none [0%], trace [0% - not measurable], rare [0-2%], present [2-10%], common [10-40%], and abundant [<40%]) (Miksa et al. 2004).

Archaeological Application of Actualistic Petrofacies Model

Upon successful construction of the petrofacies model, hand sample descriptions, and flow chart, results will be exported for use within ceramic analyses (Miksa and Heidke 2001). The initial test will utilize a sample of sherds recovered from the Angelina River basin. This sample of ceramic sherds was made available by Dr. Timothy K. Perttula, who provided written authorization for destructive analyses to facilitate the production of ceramic thin-sections.

A large quantity of INAA samples exist from the Angelina River basin (to include the adjacent Attoyac and Ayish Bayou) including 22 sites with a combined 311 analyzed sherds (Perttula 2010). The peripheral river basins (Neches and Sabine Rivers) contain 20 sites with 183 analyzed sherds, and 33 sites with 207 analyzed sherds, respectively (Perttula 2010); thus, there are 75 archaeological sites with a combined 701 INAA samples, a selection of which will be utilized as the representative sample.

Sherds selected as the representative sample will undergo analysis with a binocular stereomicroscope to characterize three variables to of temper composition (Miksa et al 2004). Those variables consist of temper type (i.e., sand, hematite, grog, etc.), generic temper source (i.e., geographic and tectonic origin), and specific temper source (petrofacies of origin) (Miksa et al. 2004).

To test the binocular microscope classification and petrofacies membership by discriminant functions, a stratified sample will be selected for use in point counting (Miksa et al. 2004). These data will be subjected to discriminant analysis to compare petrofacies predictions between petrographic and binocular microscopic classifications, and make the final petrofacies

determination (Miksa et al. 2004). The stratified sherd sample will then be used to represent the overall data set, and inform archaeological interpretations (Miksa et al. 2004).

IMPACT OF THE CERAMIC PETROFACIES MODEL UPON ARCHAEOLOGY

The concept of employing ceramic petrofacies as a method of provenance exploration began with Lombard's (1987, 1989) efforts to locate the source of sand temper for Hohokam ceramics. Once a petrofacies is developed, it significantly contributes to petrographic analyses by allowing investigators to assign ceramic sherds to probable zones of raw material procurement (Heidke 2006; Miksa 1998; Miksa and Heidke 1995; Miksa et al. 2006; Wichlacz 2006). This then allows us to interpret ceramic production and the movement of pottery within the river basin.

Results similar to those in Arizona (see Clark and Heidke 1998; Miksa et al. 2006) would allow ceramic petrographers to connect areas of raw material procurement with specific ceramics within known Woodland and Caddo assemblages. This manner of investigation can yield results that elucidate both inter and intra-site relationships of the prehistoric occupants, providing an invaluable asset within the framework of research questions aimed at transitional periods between the Late Archaic and Woodland, and within an exploration of the origin of the Caddo culture in East Texas.

Implications For Ceramic Petrography

The use of petrofacies exponentially increases the scope and utility of ceramic petrography. By noting the relative abundance of local sands instead of only ubiquitous materials, petrofacies models provide a high-definition method of assigning ceramic provenance (Miksa and Heidke 1995). This can facilitate the production of increasingly complex research questions, and provide the spatial and temporal resolution needed to begin a more detailed discussion of manufacture and use, ceramic economy, migration, exchange networks, and temporal trends.

Reese-Taylor (1993, 1995) discovered that, with rare exception, ceramic samples containing alkali feldspars are restricted to Caddo sites within the Sulphur River basin, and range in frequency from 0-20%. The exception occurs at a Sabine River site where alkali feldspars occur at a frequency of 40% (Reese-Taylor 1993). She recognized that the presence of alkali feldspars, in most cases, occurred at differing frequencies across the landscape. These disparities between ceramic populations are further clarified by the admixture within the paste; one with a mature quartz sand and a low frequency of alkali feldspars, and another of immature arkosic sand with higher alkali feldspar frequencies (Reese-Taylor 1993, 1995). There was also a notable difference in the frequency of hematite across the Cypress Creek, Sulphur, and Sabine River basins (Reese-Taylor 1993, 1995). This variation occurs within the same geologic zone, highlighting the intra-zonal variability that could be clarified through the application of the petrofacies method of analysis.

Skokan and Perttula (1997:285) point out that variation in paste composition among the different Caddo vessel forms at the Mockingbird site could be evidence of disparate function and use, possibly reflecting an intentional choice of ceramic style. They subsequently note that chert non-plastics appeared common within the Mockingbird sherds, but were "virtually absent from the Caddoan sites in the other two drainages" (Skokan and Perttula 1997:285). Petrographic analyses from sites within the adjacent drainages indicate the ubiquitous inclusion of alkali feldspars, a trait that occurs in very low frequency at Mockingbird (Skokan and Perttula 1997).

These disparities were interpreted as differing ceramic traditions that can be – based upon the inclusion of sand-sized non-plastics – differentiated by either their presence or absence.

In a subsequent report, Skokan-Switek (1997) refined this concept and discusses the possible indicators of local versus non-local ceramics. In doing so, she mentions that “[a] ceramic assemblage with a wide variety of inclusions would indicate that several sources were used to make the vessels or that some of the ceramics were traded onto the site. On the other hand, a limited variety of minerals and grain sizes would indicate a single source or sources occurring in similar geologic regimes” (Skokan-Switek 1997:Appendix C). In this case, the petrofacies method of analysis could assist in exploring the validity of this hypothesis through the direct correlation of geologic inclusions within the ceramic paste. If validated, this test of the method could assist in exploring not only intra-site comparisons, but also those of the ceramics determined to be of non-local origin. Should the sand composition of the non-local sherds be found to match another petrofacies, then arguments for possible exchange relationships, local ceramic economy, and manufacturing skill could be bolstered. If occurring within the context of a Woodland occupation, arguments could also be explored on the topic of seasonal occupations.

Within the same report, Skokan-Switek (1997) urges consideration of a systematic soil sampling strategy to obtain a higher resolution for questions of ceramic provenance. Following these observations, Perttula (1999:296) calls attention to the trend that Caddo ceramics appear to be made from local clays “with distinctive mineral and temper characteristics.” Whether or not this evidence is indicative of discrete temper resource procurement zones (i.e., petrofacies) remains unknown, but does illustrate the potential successes for an application of the method in East Texas.

A model of ceramic petrofacies can augment recent radiocarbon (Selden 2012; Selden and Perttula 2013) and INAA efforts (see Perttula and Selden 2013; Selden 2013a, 2013b), aiding in delineating components of archaeological sites contemporary occupational episodes. This could aid in extending dialogues regarding potential networks that existed between groups (Allen et al. 1997; Brumfield and Earle 1987; Janetski 2002; Orton et al. 1983; Parsons and Price 1971), the ceramic economy, to include location, organization, and production (Cobb 1993; Costin 1991, 1993, 2001, 2005, 2007; Earle 1982; Mills and Crown 1995; Rice 1987), technological and functional attributes, to include volume, firing, and contents (black drink?) (Jeske 1992; Rice 1987), identity, to include regional traditions and regional and inter-regional interactions (Costin 1998; Duff 2002), and perhaps even social organization and inequality (Lass 1998; Modjeska 1982; Sinopoli 1991), all of which could be furthered by a more in-depth and critical analysis of the ceramic-bearing components within the Angelina River basin.

Methods employed in this investigation are globally exportable, and can be expanded to include peripheral river basins and drainages where other methods of analysis have met with only marginal success. This can further those efforts of academic and contract archaeologists alike, as they continue to enhance current interpretations, enriching our knowledge of current and past American Indian populations. In this case, these contributions can expand the efforts of the Caddo people as they continue to consider the interactions among both Caddo and neighboring groups that previously inhabited this East Texas borderland.

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FIGURES

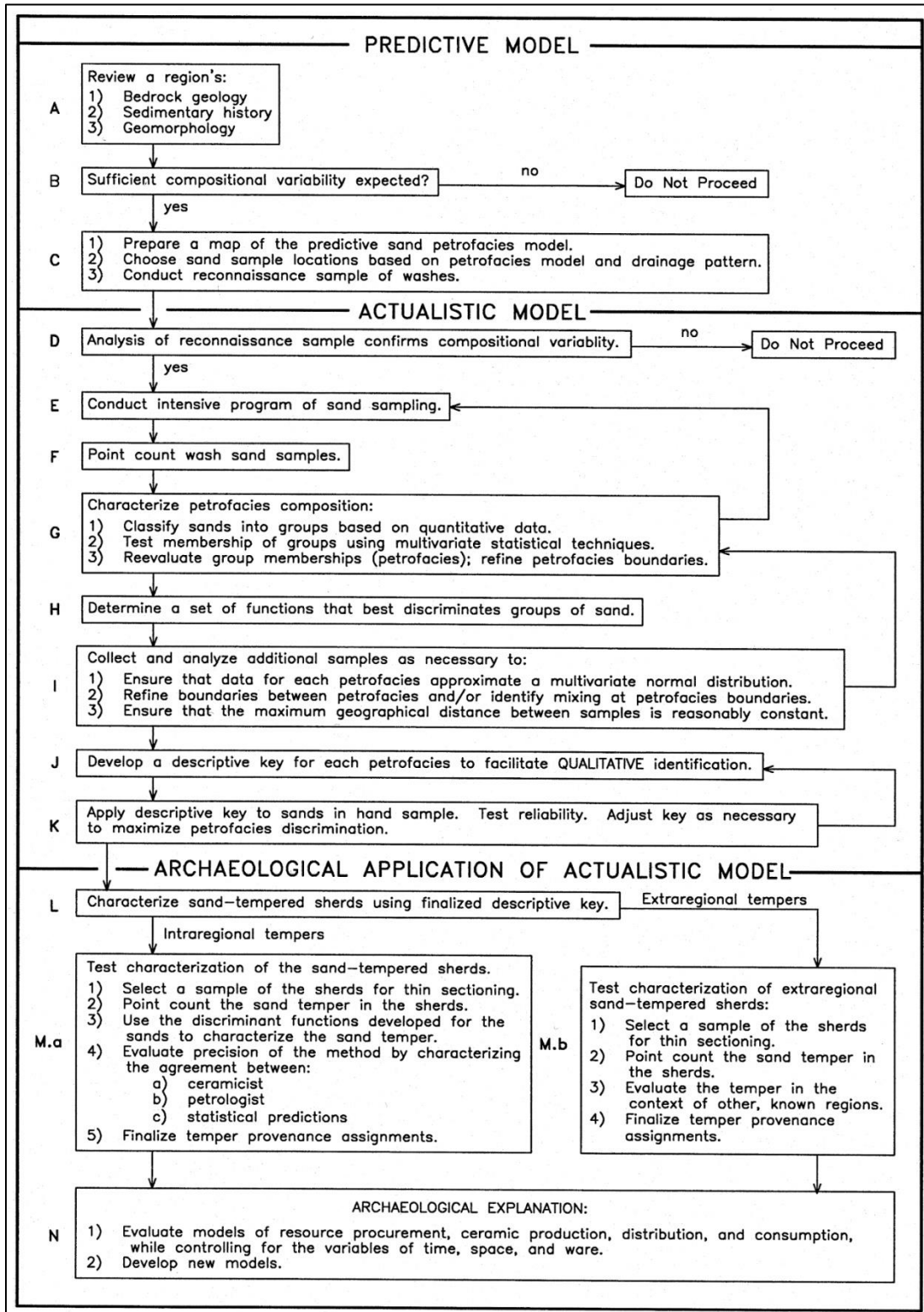


Figure 1. From Miksa and Heidke (1995:Figure 9.3, 2001:Figure 2).

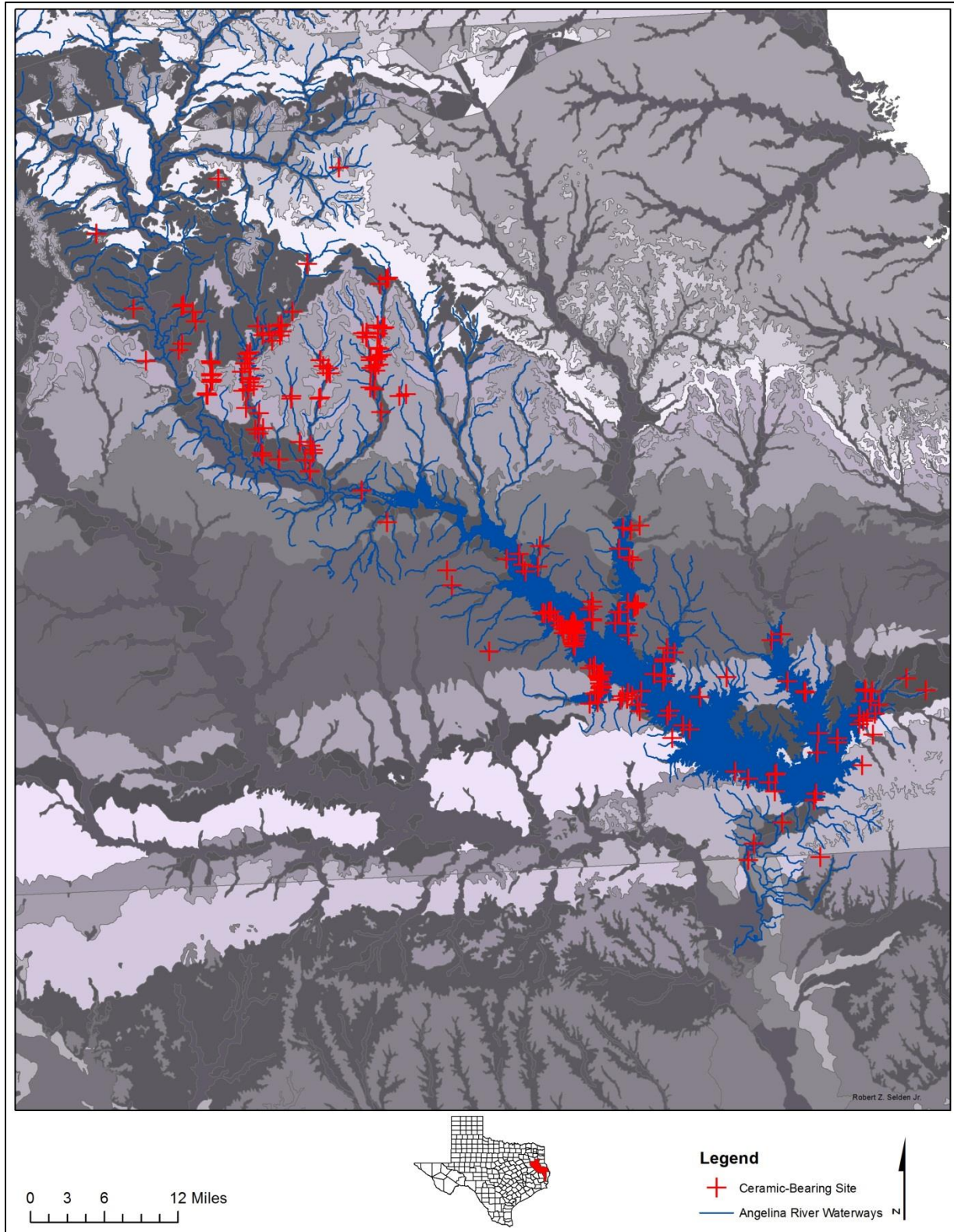


Figure 2. Geologic context for ceramic-bearing archaeological sites in the southern Angelina River basin.

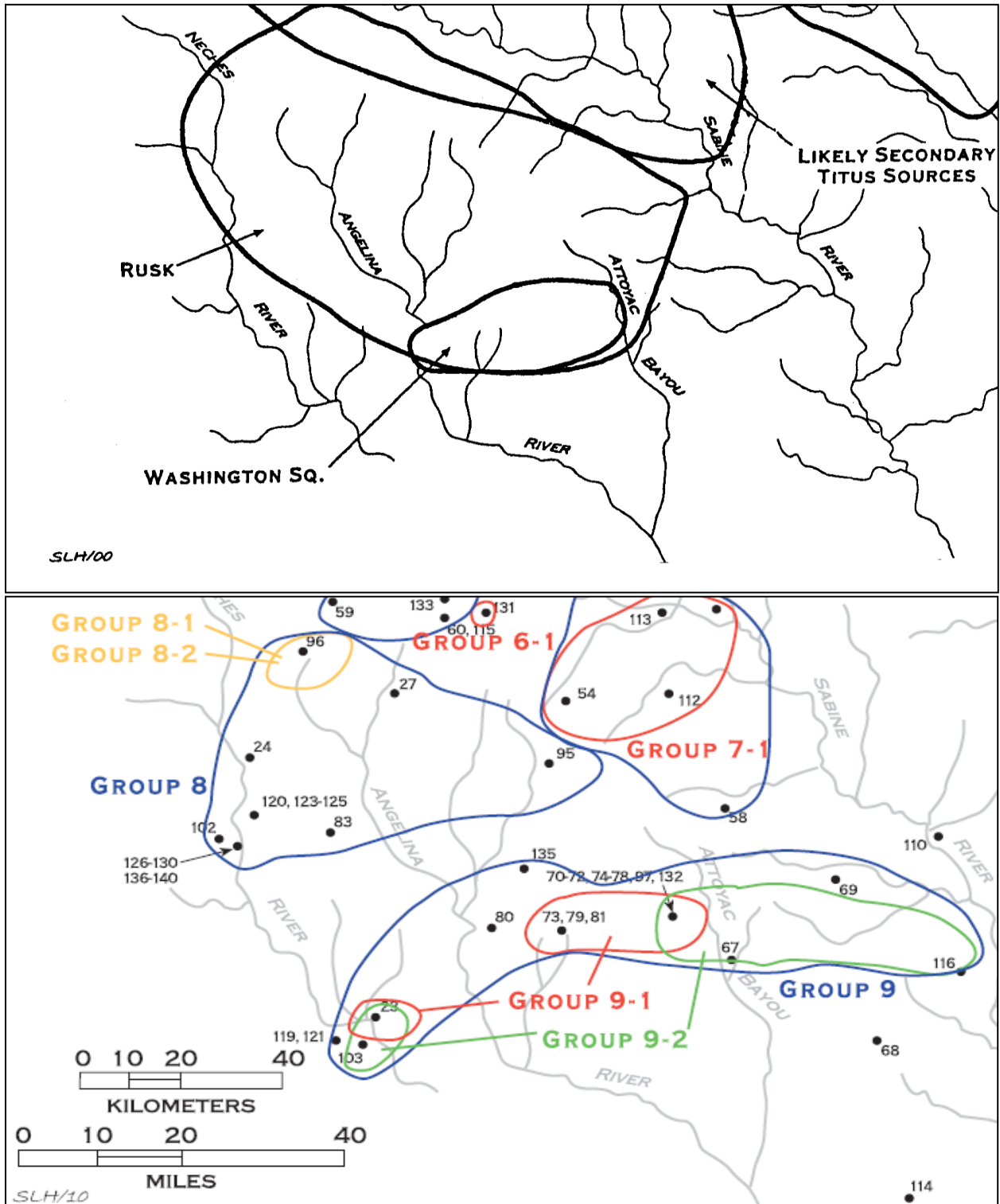


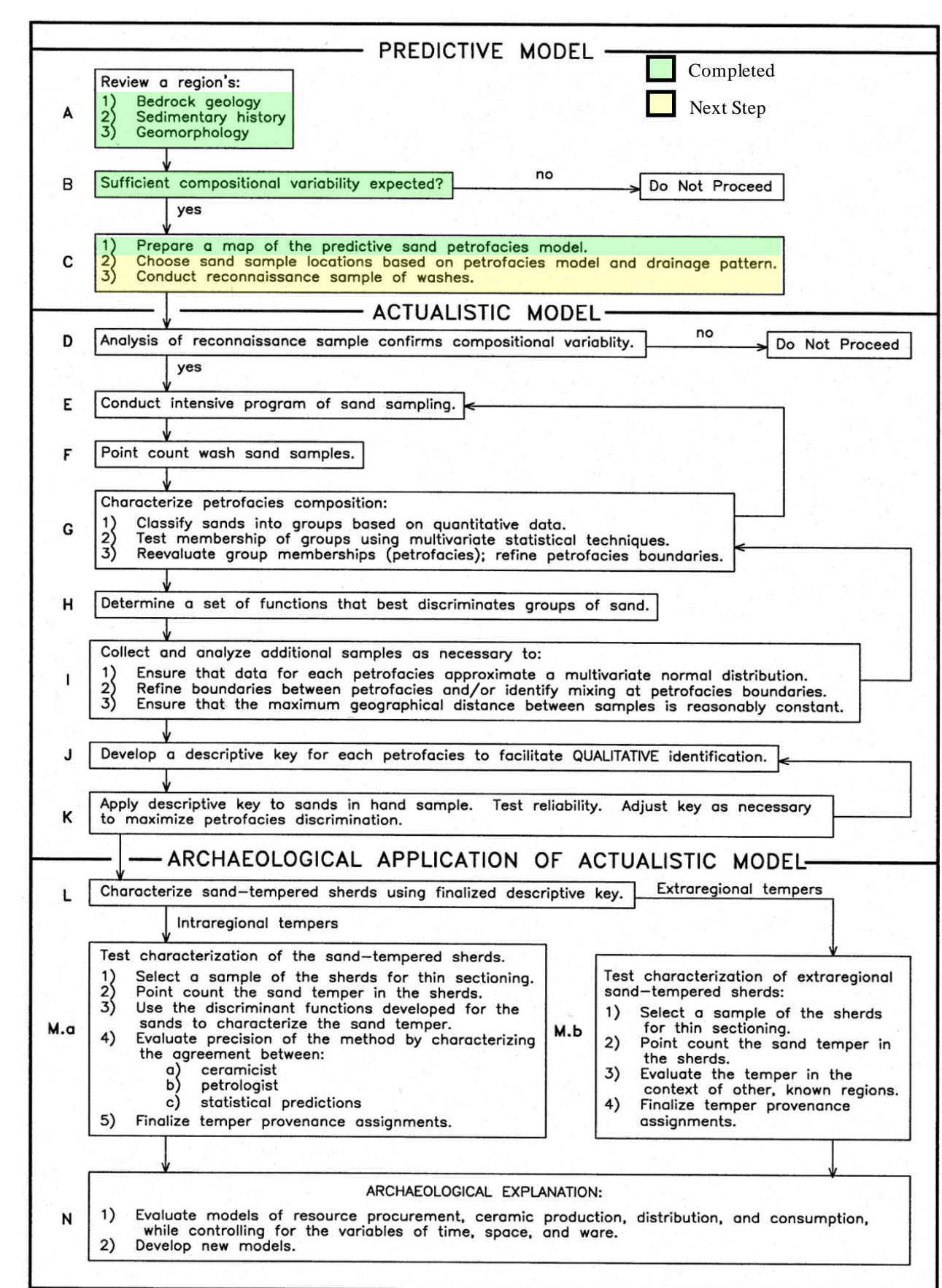
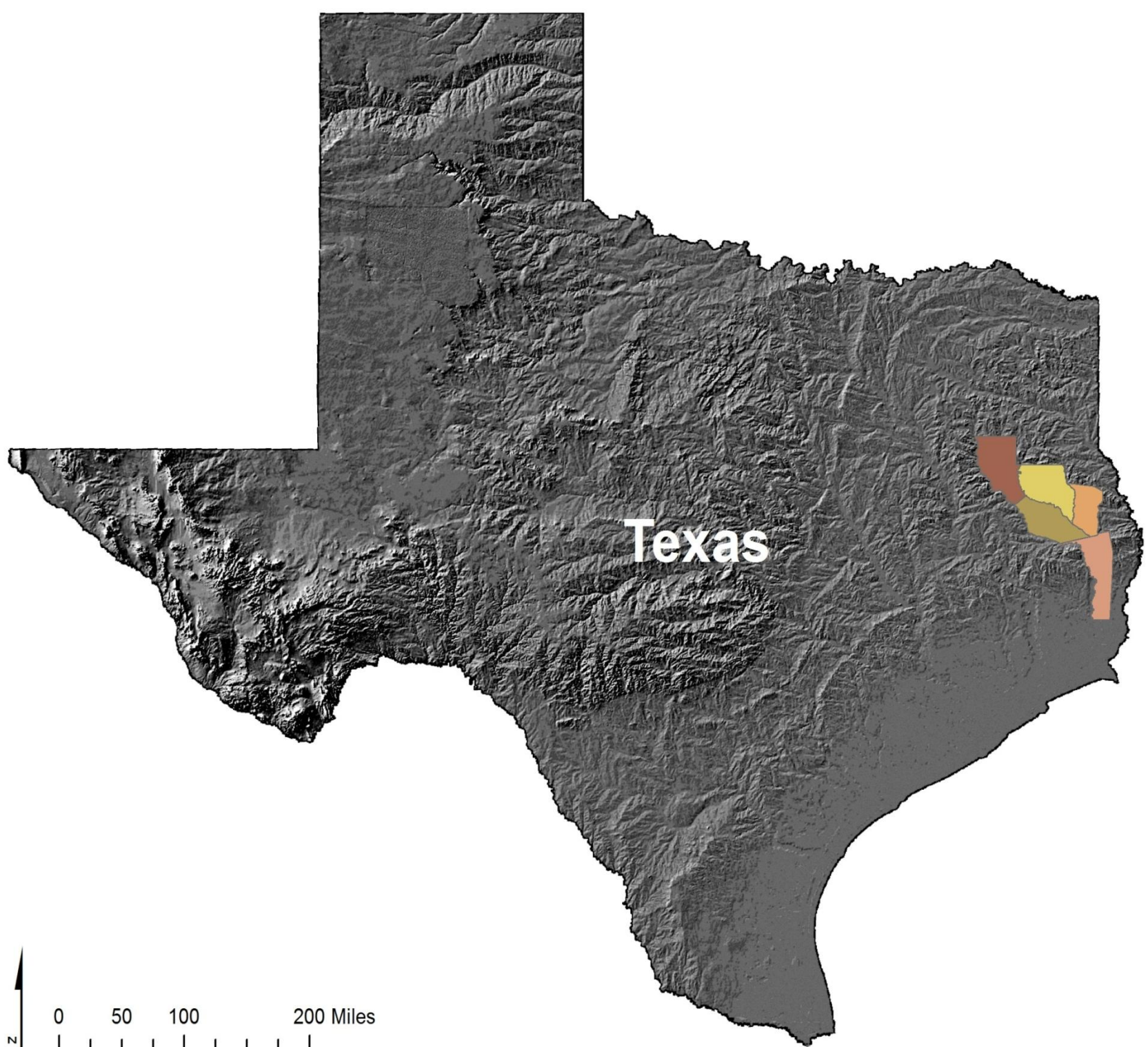
Figure 3. INAA groups in 2000 (top) (Pertulla and Ferguson 2010: Figure 2) and in 2010 (bottom) (Pertulla and Ferguson 2010: Figure 3) within the Angelina River basin.



Figure 4. Predicted petrofacies boundaries. Lombard lines represent differing zones of sand composition.

SIGNIFICANCE OF THE PETROFACIES MODEL

In archaeological application, petrofacies can be thought of as “temper resource procurement zones whose sand compositions are distinct from one another at a relevant scale of investigation” (Miksa et al. 2004). This project develops and tests a model of petrofacies for the lower Angelina River basin in East Texas. The temporal period of interest lies within two divisions, namely Woodland and Caddo, the former ranging from 500 B.C.-A.D. 800 and the latter is represented by four subdivisions: Formative Caddo (A.D. 800-1000), Early Caddo (A.D. 1000-1200), Middle Caddo (A.D. 1200-1400), and Late Caddo (A.D. 1400-1680). Recent difficulties in geochemical (INAA) research has made it challenging to locate areas of ceramic production; however, the elevated degree of geologic variability in the lower Angelina River makes it an ideal location to explore the viability of this method. Ceramic provenance is of particular import within the lower Angelina River, which is located along the southern border of the Caddo homeland. The region has not been well-explored as local archaeological projects tend to focus less upon data-recovery (Corbin 1994, Jelks 1965, Pertulla 2008), than basic pedestrian and testing surveys (Austin 2006; Bonine et al. 2004; Brownlow 2002; Fields 1979; Fletcher 1980a, 1980b; Hubbard 1998; Jones 2009; Jones and Trierweiler 2005; Middlebrook 1994, 1997a, 1997b; Pertulla et al. 2010; Rose and Jones 1994, 2010; Skinner and Trask 1996; Trierweiler and Bonine 2003; Trierweiler and Galan 2002). This indicates the possibility for significant returns within this case study, while the method can be expanded to include the peripheral drainage basins.



GEOLOGY OF THE ANGELINA RIVER BASIN

The complex geology in East Texas perpendicularly intersects the course of the Angelina River, making it well suited for a model of petrofacies. Local rocks and sediments range from the Eocene to the present (TNRIS 2012), and the geology of the Angelina River basin is distinctly zoned, constituting a highly variable geologic composition. Due to the considerable degree of geologic variability throughout the study area, it is expected that erosion will produce unique compositions within stream sediments that appear decidedly different due to the distinct geology of each zone.

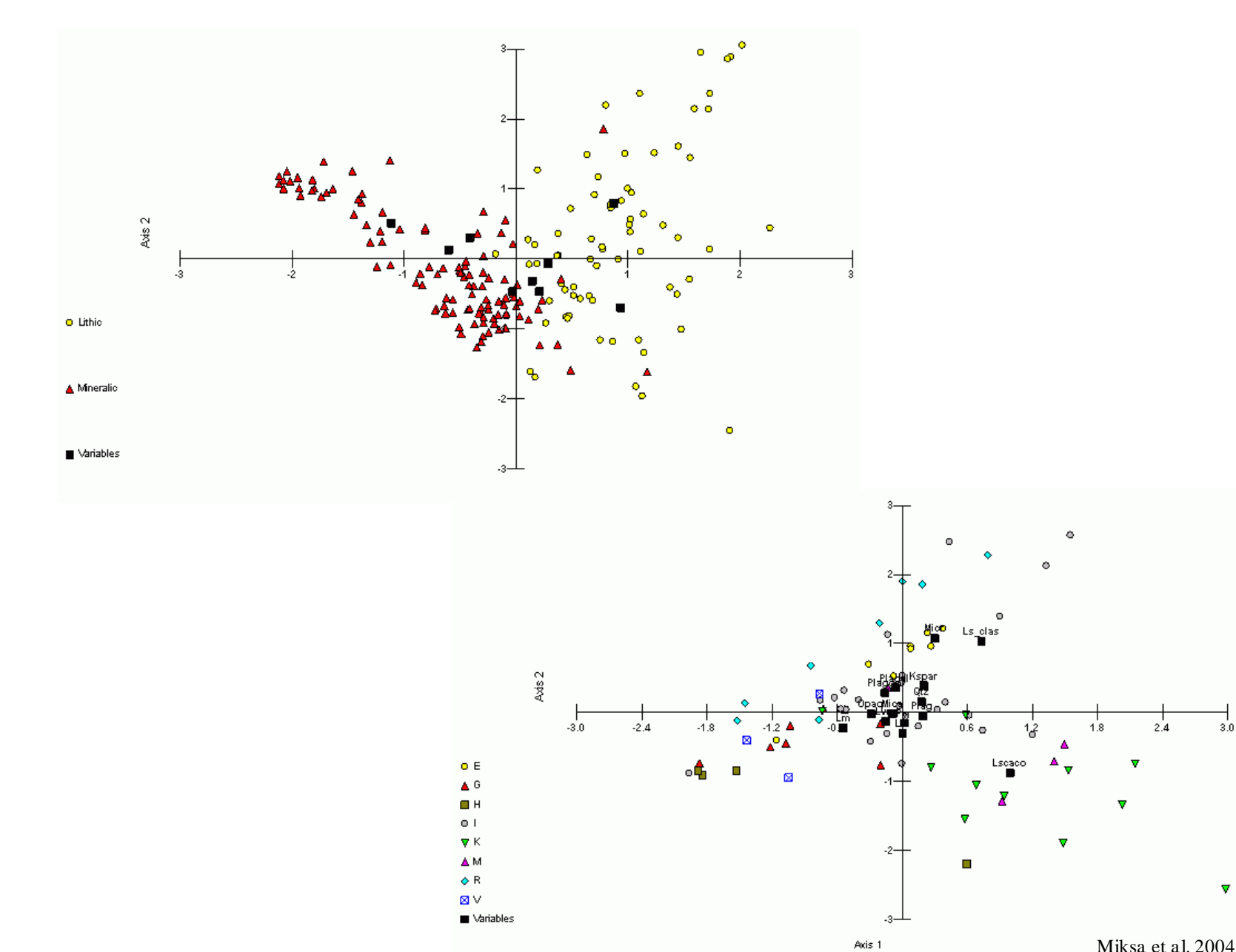
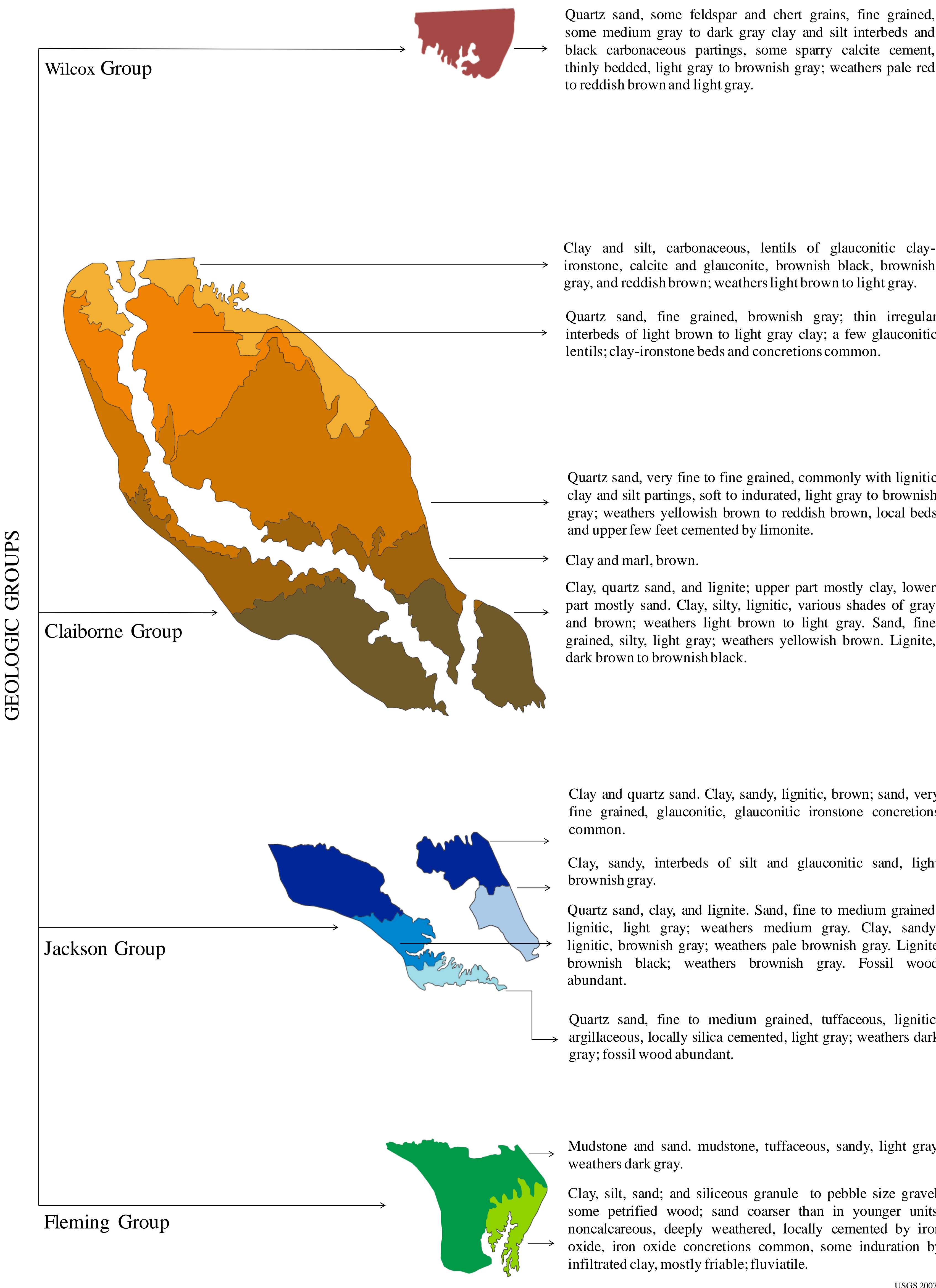
DEVELOPMENT OF THE HAND SAMPLE IDENTIFICATION MODEL

Advancement of petrofacies models based upon thin-section point counts allows for rigorous quantitative treatment for problems of temper provenance; however, the application of petrographic methods to prehistoric ceramics is limited by time and fiscal constraints (Miksa and Heidke 2001). To formulate a less imposing model, hand samples for each petrofacies will be created via point count and discriminant analysis as a means to construct the descriptive key (Miksa and Heidke 2001). This will allow for petrofacies assignment by binocular microscope, which can be substantiated by point counts and statistical analyses as an assessment of accuracy (Miksa and Heidke 2001).

Hand samples, consisting of raw sands, will be created using the remainder of the sample that was originally split and cleaned to create petrographic thin-sections. These will remain within the 30-dram vial with a magnifying lid to illustrate the variability within. Classification of these samples described as one of six ordinal categories (i.e., none [0%], trace [0% - not measurable], rare [0-2%], present [2-10%], common [10-40%], and abundant [<40%]) (Miksa et al. 2004).

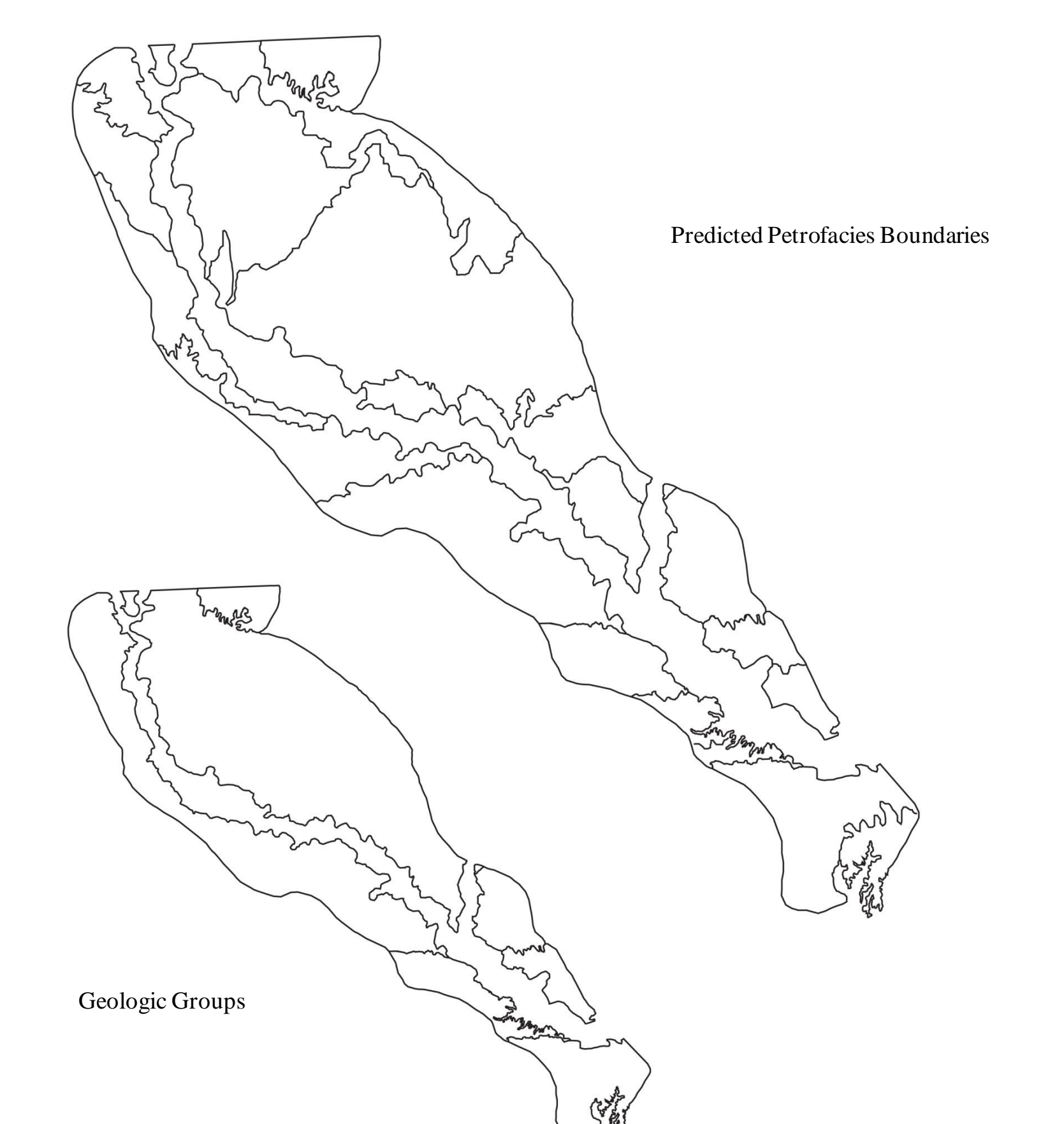
ABSTRACT

Ceramic provenance studies remain the basis of worldwide archaeological research concerned with reconstructing exchange networks, tracing migrations, and informing upon ceramic economy. Unfortunately, Texas archaeologists have been plagued with an inability to trace ceramic production sources to the same extent as researchers within other regions. Ceramic petrofacies models have been employed successfully in archaeological contexts at the San Pedro Valley, Tonto basin, Tucson basin, Agua Fria, and Gila and Phoenix basins in Arizona, but have not yet been employed east of Arizona. Data resulting from the construction of an actualistic petrofacies model in the prehistoric coastal environment of East Texas could provide the necessary foundation for archaeologists to begin expanding upon the current dialogue regarding the provenance of ceramic vessels utilized by precolonial Woodland and Caddo populations.



CERAMIC PETROGRAPHY

The use of petrofacies exponentially increases the scope and utility of ceramic petrography. By noting the relative abundance of local sands instead of only ubiquitous materials, petrofacies models provide a high-resolution method of assigning ceramic provenance (Miksa and Heidke 1995). Sherds selected as the representative sample will undergo analysis with a binocular stereomicroscope to characterize three variables to of temper composition (Miksa et al 2004). Those variables consist of temper type (i.e., sand, hematite, grog, etc.), generic temper source (i.e., geographic and tectonic origin), and specific temper source (petrofacies of origin) (Miksa et al. 2004). This can facilitate the production of increasingly complex research questions for ceramic-bearing sites (seen at right), providing the spatial and temporal resolution needed to inform more detailed discussions of manufacture and use, ceramic economy, migration, exchange networks, and regional temporal trends.



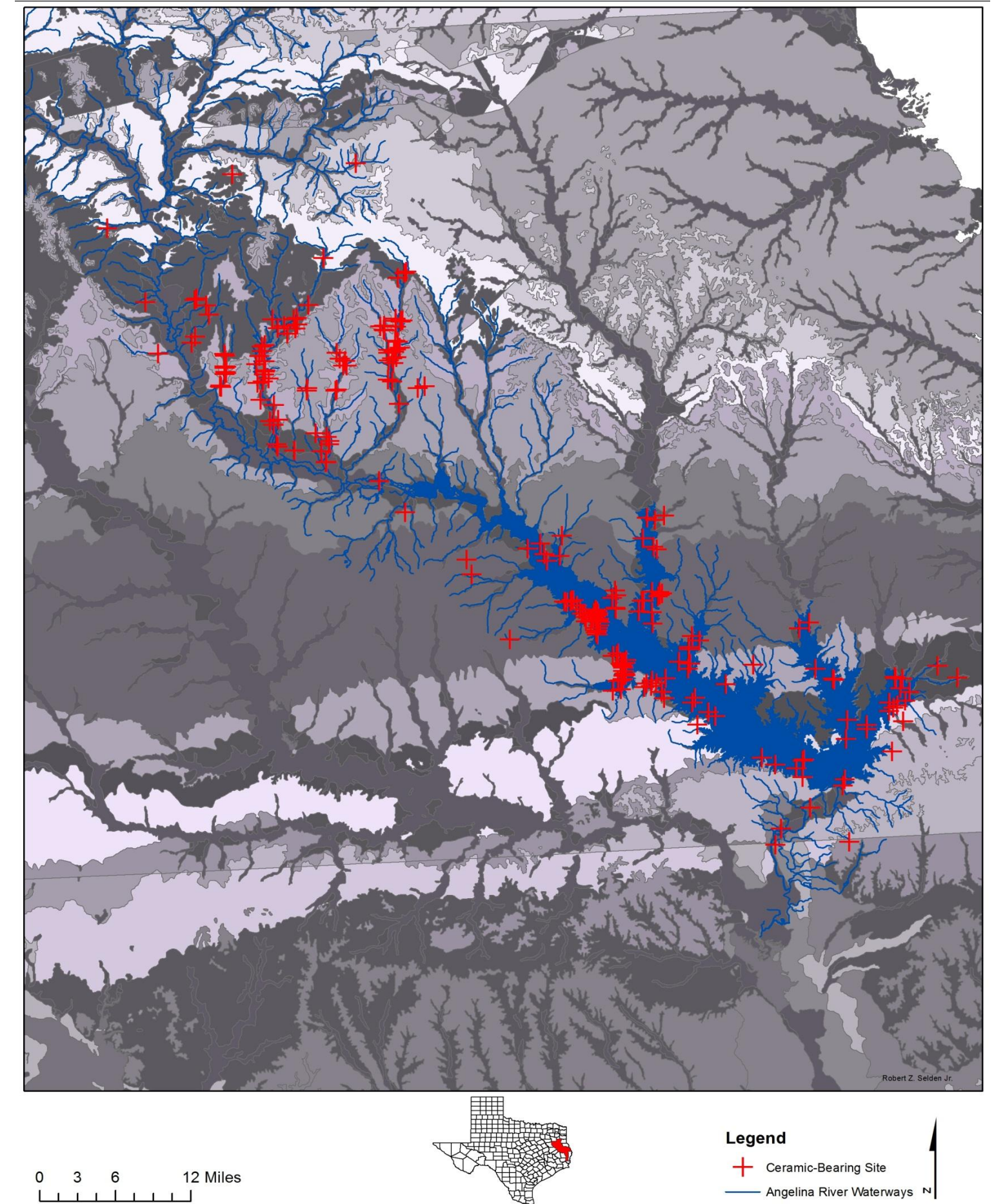
ACKNOWLEDGMENTS

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STATISTICAL ANALYSIS

Correspondence and discriminant analysis will be utilized to illustrate statistical correlations between the sand sample and point count data. Correspondence analysis will allow for a discussion of the relationships between the sand samples and point count parameters, while discriminant analysis (with sand and sherd samples as objects, and point counts as the variable) will be used to evaluate the degree of intrapetrofacies compositional variability within the river basin, and to assign sherds to a specific petrofacies (Heidke and Miksa 1999).

Geologic Context for Ceramic Bearing Sites in the Angelina River Basin



THE PREDICTIVE MODEL

The predictive model of sand composition zones (petrofacies) was created using the Geologic Database of Texas (USGS 2007), and geologic zones identified within the study area. By definition, the boundaries of petrofacies are a created construct, since abrupt changes in composition rarely occur within adjacent drainages (Miksa and Heidke 2001; Miksa et al. 2004). Boundaries for the predictive model – dubbed Lombard Lines in the context of this project – are named for Dr. James P. Lombard who pioneered the method, and illustrate areas where divisions in sand composition zones are expected to occur. This model will guide the sampling strategy, in which sands will be collected on a zone-by-zone basis within the river basin.