



1994

## Rowland Clark and Dan Holdeman Site Human Skeletal Remains

Carol J. Loveland  
*Unknown*

Follow this and additional works at: <https://scholarworks.sfasu.edu/ita>



Part of the American Material Culture Commons, Archaeological Anthropology Commons, Environmental Studies Commons, Other American Studies Commons, Other Arts and Humanities Commons, Other History of Art, Architecture, and Archaeology Commons, and the United States History Commons

Tell us how this article helped you.

---

### Repository Citation

Loveland, Carol J. (1994) "Rowland Clark and Dan Holdeman Site Human Skeletal Remains," *Index of Texas Archaeology: Open Access Gray Literature from the Lone Star State*: Vol. 1994 , Article 9.

<https://doi.org/10.21112/.ita.1994.1.9>

ISSN: 2475-9333

Available at: <https://scholarworks.sfasu.edu/ita/vol1994/iss1/9>

This Article is brought to you for free and open access by SFA ScholarWorks. It has been accepted for inclusion in Index of Texas Archaeology: Open Access Gray Literature from the Lone Star State by an authorized editor of SFA ScholarWorks. For more information, please contact [cdsscholarworks@sfasu.edu](mailto:cdsscholarworks@sfasu.edu).

---

## Rowland Clark and Dan Holdeman Site Human Skeletal Remains

Creative Commons License



This work is licensed under a [Creative Commons Attribution 4.0 License](https://creativecommons.org/licenses/by/4.0/).

**Appendix 2**  
**Rowland Clark and Dan Holdeman Site**  
**Human Skeletal Remains**

*Carol J. Loveland*

**INTRODUCTION**

The Rowland Clark site was occupied by Caddoan Indian groups from approximately A.D. 1300-1600+. Twenty one of the 39 burials recovered during the Museum of the Red River excavations were assigned to the earliest McCurtain phase occupation (ca. A.D. 1300-1450); 14 burials were ascribed to a later McCurtain occupation between ca. A.D. 1450 and 1600; four burials belonged to the final McCurtain occupation (ca. A.D. 1600+) of the site. Since infants and children were buried under house floors rather than in the cemetery area associated with each time period, their interment does not necessarily follow the assigned time period. Due to poor preservation and small sample sizes all burials were evaluated as a single Caddoan population.

The burials from the Dan Holdeman site were found in a mound and three cemetery areas located on a terrace adjacent to the Red River. Skeletons of 26 individuals were recovered. The remains of an additional 15 individuals could not be retrieved due to their poor preservation. The acidity of the soil at the site contributed to considerable disintegration of the bones, leaving all burials in fragmentary condition.

Three time periods are represented in the burials from the Dan Holdeman site. Burials 22, 23, and 25 were associated with a Formative Caddoan occupation (that Perino designated the Spiro Focus) dating about A.D. 1000. Interments corresponding with the Middle Caddoan Sanders Focus, dated about A.D. 1200, include Burials 1-20 and 24. One subadult, Burial 21, dates to the latter portion of the McCurtain phase (ca. A.D. 1650). The skeletal material that could not be retrieved represented individuals living during the Formative and Middle Caddoan occupations.

Since much of the data on the osteoarcheology of the Clark and Holdeman sites has been presented in Loveland (1987), specifically stature estimates, skeletal anomalies, and caries rates, it is the purpose of this appendix to summarize other aspects of the skeletal biology of the prehistoric inhabitants of the two sites. However, the poor condition of the skeletons recovered from the sites precludes accurately assessing the biological condition and adaptive efficiency of the people who lived at the site. However, the analyses presented here, and in Loveland (1987), present data that provides a fairly complete picture of Caddoan adaptive efficiency on the Red River in Northeast Texas.

**SKELETAL INVENTORIES**

The skeletal remains from the Rowland Clark and Dan Holdeman sites represent Caddoan individuals who lived over a span of several hundred years. Ideally, those burials associated with each site occupation should be treated as a separate sample; however, due to the fragmentary nature of the remains and the small number of burials available for study, the interments from each site were analyzed as single groups. Tables 1 and 2 present a brief description of each burial from the two sites, including sex, age, skeletal elements present, and skeletal anomalies noted. Sex designations in these tables include those

individuals classified as probable males or females. Hereafter, those burials will be grouped with their respective sex.

### Dentition

Dental pathologies occurred commonly in the Rowland Clark population; those observed included caries, broken teeth associated with caries, and abscesses. Table 3 shows the distribution of these dental problems by tooth type and sex. The dentition of several burials was excluded from this analysis since the teeth and alveolar bone were too fragmentary and broken to permit determination of tooth side and position.

The males exhibited slightly more dental problems than the females: two more caries, one more abscess, and 11 more teeth lost antemortem. This probably reflects their greater longevity rather than any difference in the use or care of their teeth.

The dentition of six males and three females at Dan Holdeman was sufficiently complete to determine the condition of the teeth based upon type, position, and side. Table 4 presents the distribution of caries, abscesses, and broken teeth among the 229 teeth examined from these nine individuals. Caries were entirely limited to the posterior dentition; however, it is possible that caries may have occurred in some of the missing anterior teeth.

### Cranial Measurements

Few of the Holdeman or Rowland Clark burials were complete enough to measure. The measurements that were taken are provided in Tables 5 and 6 for comparison with other Caddoan populations.

## CONCLUSION

Despite the poor preservation of the Clark and Holdeman site burials, the bioarcheological analyses of the skeletons contributes to a better understanding of the prehistoric Caddo Indians and their adaptation to their environment (Loveland 1987). Many questions about the skeletal biology of the Rowland Clark and Holdeman populations remain unanswered because the small sample sizes and fragmentary nature of the remains prohibits a comprehensive analysis. However, analysis of the available skeletal data can contribute to our understanding of the Caddoan people.

Table 1. Description of the Burials from the Rowland Clark Site.

Interments Dated A.D. 1300-1450					
Burial Number	Sex*	Age	Skeletal Elements Present	Pathology Observed	Other
1	F	20-30	Fragmentary long bones, foot and hand bones, patellae, clavicle, calvarium, scapula, innominate, mandible	None	
2	F?	20-30	Right ilium, fragmentary sacrum, long bones, calvarium	None	
3	M	20-30	Fragmentary bones of most of skeleton including mandible but calvarium missing	Osteoarthritis distal humeri	
4	F?	20-30	Fragmentary mandible, calvarium, upper cervical vertebrae, long bones	None	
5	--	Infant	Fragmentary calvarium	None	
6	--	Subadult (early to midteen)	3 molars (one deciduous)	None	
7	?	30+	Fragmentary calvarium, mandible, long bones, vertebrae		Rodent gnawing on long bone fragments
8	?	20-30	Fragmentary calvarium, mandible, vertebrae, distal humerus	Schmorl's Node, thoracic vertebrae	
9	--	Subadult	2 permanent molar crowns	None	

Interments Dated A.D. 1300-1450					
Burial Number	Sex*	Age	Skeletal Elements Present	Pathology Observed	Other
10	M	30+	Fragmentary calvarium, mandible, first and second cervical vertebrae	None	
11	--	Subadult (early teen)	Fragmentary calvarium and mandible	None	
12	?	30+	Fragmentary mandible, calvarium, long bones	None	Rodent gnawing on frontal
13	F?	30+	Fragmentary calvarium, mandible	None	
14	F?	20-30	Mandible; fragmentary calvarium	None	
15	?	30+	Fragmentary calvarium, mandible, upper cervical vertebrae	Large abscess left MI mandible	Pacchionian bodies
16	--	Subadult	Very fragmentary calvarium, teeth	None	
17	?	Adult	Fragmentary calvarium, cervical vertebrae	None	
18	M?	30+	Mandible; fragmentary calvarium, cervical vertebrae, femora shafts; hand bones	Slight osteophytosis of cervical vertebrae	
19	?	20-30	Fragmentary calvarium, mandible, first and second cervical vertebrae	Healed depressed fracture on occipital bone	
20	M	30+	Fragmentary calvarium, mandible, cervical vertebrae, femora shafts	Moderate osteophytosis of cervical vertebrae; 6 Button Osteomas on cranium	

Table 1, cont.

Interments Dated A.D. 1300-1450						
Burial Number	Sex*	Age	Skeletal Elements Present	Pathology Observed	Other	
21	?	30-	Fragmentary mandible, calvarium, long bones, foot bones, vertebrae	Periosteal reaction tibiae; osteo- arthritis distal femora	Rodent gnawing on long bones	
Interments Dated A.D. 1450-1600						
Burial Number	Sex	Age	Skeletal Elements Present	Pathology Observed	Other	
22	F	20-30	Fragmentary calvarium, mandible, first and second cervical vertebrae	None		
23	--	Subadult	Loose deciduous and permanent teeth	None		
24	F	20-30	Mandible; fragmentary calvarium	None		
25	M	30-	Mandible; fragmentary calvarium, cervical vertebrae	Moderate osteophytosis of cervical vertebrae	Cremated cranial fragments included with burial	
26	F	20-30	Mandible; fragmentary calvarium, long bones, ribs, vertebrae, clavicle, hand bones	Slight cribra orbitalia both orbits; periosteal reaction tibia and fibula	Pacchionian bodies; rodent gnawing	
27	?	30+?	Few fragments of calvarium and long bones	None		
28	F	20-30	Fragmentary calvarium, cervical vertebrae; mandible	Right mastoid considerably smaller than left		
29	M	30-	Mandible; fragmentary calvarium, long bones, vertebrae	Periostitis right distal femur shaft; osteophytosis cervical vertebrae		
30	--	Infant	Right ilium, tibia; left femur, rib fragments	None	Rodent gnawing on femur	
31	?	Adult	Fragmentary lower limb and foot bones	None		
32	--	Infant	Fragmentary bones of skeleton	None		
33	--	Subadult (teenager)	Fragmentary lower limb and foot bones	None		
34	--	Subadult (6-12)	Fragmentary calvarium, mandible, cervical vertebrae		3 adult cervical vertebrae included	
35	F?	30+	Fragmentary cranium, mandible, long bones, cervical vertebrae	None		
Interments Dated A.D. 1600+						
Burial Number	Sex*	Age	Skeletal Elements Present	Pathology Observed	Other	
36	--	Subadult	Loose deciduous and permanent teeth	None		
Interments Dated A.D. 1600+						
Burial Number	Sex	Age	Skeletal Elements Present	Pathology Observed	Other	
37	M?	30-	Fragmentary cranium, mandible, long bones	Abscess M1 right maxilla	Rodent gnawing on long bones	
38	M?	20-30	Fragmentary remains of most of skeleton	None		
39	--	Infant	Fragmentary calvarium, post- cranial bones	None		

\*Sex designation denoted as follows:

- F - female
- F? - probable female
- M - male
- M? - probable male
- ? - sex undetermined
- - subadult, no sex determination

Table 2. Description of the Burials from the Dan Holdeman Site.

Burial Number	Sex*	Age	Skeletal Elements Present	Anomalies Observed	Comments
1	M?	20-30	Fragmentary calvarium, mandible, scapula, clavicle, humerus, femora	None	
2A	M?	20-30	Femora; mandible; fragmentary remains of most of skeleton	Kyphosis L5-S1	Intrusive burial; rodent gnawing on femora and humerus
2B	M	30+	Fragmentary calvarium, mandible, vertebrae, clavicle, tibia, femora, innominate, humeri	Healed depressed fracture left frontal; periosteal reaction shaft left tibia	
3	M	20-30	Femur; mandible; fragmentary calvarium, long bones, foot bones, clavicle, ribs, patellae, vertebrae, innominates	Two button osteomas frontal bone	
4	M	20-30	Fragmentary bones of most of skeleton	None	
5	M?	20-30	Fragmentary calvarium, mandible, cervical vertebrae, talus, femora shafts	Abscess right maxilla between M <sub>1</sub> and M <sub>2</sub>	
6	F	20-30	Mandible; fragmentary calvarium, long bones, innominates, scapulae	Considerable thickening of parietals along midline	
Burial Number	Sex	Age	Skeletal Elements Present	Anomalies Observed	Comments
7	F	30+	Tibia; humerus; radius; mandible; fragmentary long bones, foot bones, patella, calvarium	None	Rodent gnawing on long bones; remains of infant (not recovered) reported near right humerus
8	M	20-30	Fragmentary calvarium, mandible long bones, foot bones, scapula, ribs, sternum	Periosteal reaction tibia fragments; enamel hypoplasia maxillary incisors	
9	SA	12-18	Fragmentary calvarium, ribs, vertebrae, sacrum, foot bones, femora shafts	None	Rodent gnawing on femora shafts; #9 and 10 buried in common grave over ashpit; bones dislocated and scattered
10	M?	20-30	Left femur; fragmentary long bones, clavicle, hand bones, scapula	None	
11	?	30+	Fragmentary calvarium, mandible, vertebrae	None	
12	?	20-30	Fragmentary calvarium, mandible, long bones, ribs, clavicle, vertebrae, talus	Fibrous dysplasia on shaft of long bone	Rodent gnawing on long bones

Table 2, cont.

Burial Number	Sex*	Age	Skeletal Elements Present	Anomalies Observed	Comments
13	M	20-30	Femora; tibia; patellae; radius; fragmentary remains of most of skeleton	None	Burial 13 had intruded upon Burial 12
14	SA	2-6	Fragmentary remains of most of skeleton	Cribræ orbitalia right orbit (left orbit missing)	
15	SA	0-1	Fragmentary remains of most of skeleton	None	
16	F	20-30	Mandible; fragmentary calvarium; long bones	Periosteal reaction tibiae shafts	
17	F?	30+	Fragmentary calvarium, vertebrae, mandible, long bones, patella	Button osteoma left frontal	
18	M?	30+	Fragmentary calvarium, mandible, long bones	Temporomandibular joint disease	Large pecten an bodies
19	SA	2-5	Fragmentary calvarium	None	
20	SA	12-18	Mandible; fragmentary remains of most of skeleton	Benign fibrous cortical defect on right distal femur shaft	Rodent gnawing on long bone shafts and mandible
21	SA	2-5	Mandible; fragmentary calvarium, long bones, vertebrae, innominate, ribs, clavicle	Cribræ orbitalia both orbits; mild porotic hyperostosis frontal	

Burial Number	Sex	Age	Skeletal Elements Present	Anomalies Observed	Comments
22	?	30+	Fragmentary calvarium, molars, premolars	None	
23	?	Adult	Fragmentary calvarium, mandible	None	
24	SA	6-12	Fragmentary calvarium, mandible	Enamel hypoplasia central maxillary incisor	
25	SA	6-12	Fragmentary calvarium	None	

\*Sex designation denoted as follows:

- F - Female
- F? - Probable Female
- M - Male
- M? - Probable Male
- ? - Sex Undetermined
- SA - Subadult, No Sex Determination

Table 3. Frequency of Common Dental Pathologies in the Clark Population.

Males (5)																	
	M3	M2	Right					Left					M1	M2	M3		
			M1	P4	P3	C	LI	CI	CI	LI	C	P3	P4				
Maxilla	2* 1B 1AM 1?	2 2AM 1?	3 1AM 1C	4 1PM	4 1B	4 1PM	3 1AM 1?	3	3	3 1C 1PM	4 1PM	4 1?	1 1?	2 1?	3 1AM 1?	2 2?	3 2?
Number of Teeth Present	(3)	(2)	(4)	(4)	(5)	(4)	(3)	(3)	(4)	(4)	(4)	(2)	(3)	(3)	(3)	(3)	
Mandible	2 3PM	3 1AM 1C	4 1AM	5	5	5	4 1PM	3 2PM	3 2PM	3 2PM	4 1PM	4 1C	3 2C	3 1AM 1A	3 1AM 1C	2 2AM	2 1PM
Number of Teeth Present	(2)	(4)	(4)	(5)	(5)	(5)	(4)	(3)	(3)	(3)	(4)	(5)	(5)	(4)	(4)	(2)	
Females (6)																	
	M3	M2	Right					Left					M1	M2	M3		
			M1	P4	P3	C	LI	CI	CI	LI	C	P3	P4				
Maxilla	4 1C	4 1C	5 1C	6	6	5	4	3	4	3 1B	5	6	6	6	4	4	
Number of Teeth Present	(5)	(5)	(6)	(6)	(6)	(5)	(4)	(3)	(4)	(4)	(5)	(6)	(6)	(6)	(5)	(4)	

Table 3, cont.

		Females (6)															
		Right							Left								
		M3	M2	M1	P4	P3	C	LI	CI	CI	LI	C	P3	P4	M1	M2	M3
Mandible		5	5	5	5	6	5	6	3	4	5	5	6	6	4	6	4
				1C	1C				1B	1B					1B		
			1PM				1PM		2PM	1PM		1C			1C		
		1?							1?								1?
																	1AM
Number of Teeth Present		(5)	(5)	(6)	(6)	(6)	(5)	(6)	(3)	(5)	(6)	(6)	(6)	(6)	(5)	(6)	(4)
		Adult, Sex Undetermined															
		Right							Left								
		M3	M2	M1	P4	P3	C	LI	CI	CI	LI	C	P3	P4	M1	M2	M3
Maxilla		2	2	2	1	1	1	2	2	2	1	2	2	2	2	1	1
					1?	1?	1?				1?					1?	
Number of Teeth Present		(2)	(2)	(2)	(1)	(1)	(1)	(2)	(2)	(2)	(1)	(2)	(2)	(2)	(2)	(1)	1PM (1)
Mandible		2	2	2	2	2	2	2	1	1	1	2	2	2	1	2	2
										1?	1?						
									1PM						1CA		
Number of Teeth Present		(2)	(2)	(2)	(2)	(2)	(2)	(2)	(1)	(1)	(1)	(2)	(2)	(2)	(2)	(2)	(2)
* - number of health teeth																	
A - Abscess																	
PM - Postmortem loss																	
BC - Caries, broken																	
C - Caries																	
AM - Antemortem loss																	
? - Bone and tooth missing																	
CA - Caries, abscess																	

Table 4. Frequency of Dental Lesions in the Holdeman Population.

	Males															
						Right					Left					
	M3	M2	M1	P4	P3	C	I1	C1	C1	I1	C	P3	P4	M1	M2	M3
Maxilla	4* ΔMI PM1	4 ΔMI C1	2 ΔM, ΔI PM1 C2	4 C1 ?1	5 ?1	5 PM1	3 PM3	6	5	4 PM2	6	5 PM1	5	5 C1	4 MI	2 ΔMI PM1
Number of Teeth Present (4)	(5)	(5)	(4)	(5)	(5)	(5)	(3)	(6)	(5)	(4)	(6)	(5)	(6)	(6)	(4)	(3)
Mandible	5 ΔMI	5 C1	5 C1	4 PM2	6	5 PM1	4 PM4	2 PM4	1 PM5	2 PM4	6	6	5 AMI	5 C1	5 C1	5 C1
Number of Teeth Present (5)	(6)	(6)	(6)	(4)	(6)	(5)	(4)	(2)	(1)	(2)	(6)	(6)	(5)	(6)	(6)	(6)
	Females															
						Right					Left					
	M3	M2	M1	P4	P3	C	I1	C1	C1	I1	C	P3	P4	M1	M2	M3
Maxilla	2 ?1	2 AMI	3	3	3	3	3	2 PM1	2 PM1	3	3	2 PM1	2 C1	2 C1	2 C1	2 PM1
Number of Teeth Present (2)	(2)	(2)	(3)	(3)	(3)	(3)	(3)	(2)	(2)	(3)	(3)	(2)	(3)	(3)	(3)	(2)
Mandible	1 AMI	3	3	1 AMI PM1	3	3	1 PM2	1 PM3	2 PM2	3 PM1	3	3	3	3	2	1 C1
Number of Teeth Present (1)	(3)	(3)	(3)	(1)	(3)	(3)	(1)	(0)	(1)	(2)	(3)	(3)	(3)	(3)	B1 (3)	(2)

- \* - Number of Healthy Teeth  
 AM - Antemortem Loss  
 A - Abscess  
 PM - Postmortem Loss  
 C - Caries  
 ? - Bone and Tooth Missing  
 B - Broken

Table 5. Cranial Measurements (mm) of the Clark Interments.

Measurement	Male		Female	
	Number of Cases	Mean	Number of Cases	Mean
Maximum Length	4	168.3	--	--
Maximum Breadth	4	145.3	--	--
Symphysis Height	5	35.8	4	36.0
Diameter Bigonial	5	104.4	4	97.5
Diameter Bicondylar	3	124.7	3	123.0
Height Ascending Ramus	5	64.8	4	58.3
Corpal Length Gonion-Gnathion	5	89.0	4	89.0

Table 6. Cranial Measurements (mm) of the Holdeman Interments.

Measurement	Male Number of Cases	Mean	Female Number of Cases	Mean
Maximum Length	--	--	2	157.0
Maximum Breadth	--	--	2	142.0
Minimum Frontal Breadth	--	--	2	93.0
Symphysis Height	1	35.0	2	34.0
Diameter Bigonial	2	105.0	1	96.0
Diameter Bicondylar	2	131.0	1	119.0
Height Ascending Ramus	2	58.0	2	57.0

### REFERENCES CITED

Loveland, Carol J.

1987 Human Skeletal Remains from the Clark and Holdeman Sites, Red River County, Texas. *Bulletin of the Texas Archeological Society* 57:165-181.

### ACKNOWLEDGMENTS

I wish to thank Gregory Perino for making it possible for me to study these skeletal collections. Dr. John B. Gregg, School of Medicine, the University of South Dakota, Sioux Falls, South Dakota, kindly consented to evaluate two of the skeletal lesions from the Holdeman site. I extend my appreciation to him.