

Contents

List of Figures.....	xi
List of Tables.....	xiii
1. Introduction.....	1
1.1. The Wichita and Affiliated Tribes	2
1.2. The Deer Creek and Bryson-Paddock Archaeological Sites.....	7
1.3. Theorizing the Colonial Era.....	9
1.4. Overview of Chapters	10
2. Field Investigations of Deer Creek	11
2.1. The 2016 Investigations	11
2.2. 2017 Excavations	19
3. Results from Artifact Analyses: Ceramics	29
3.1. Ancestral Wichita Ceramics	29
3.2. Deer Creek Ceramic Sherds.....	30
3.3. Pipe and Figurine Fragments	30
3.4. Discussion.....	33
4. Results from Artifact Analyses: Chipped Stone	35
4.1. Artifact Categories	35
4.1.1. End Scrapers	35
4.1.2. Other Unifacial Tools.....	36
4.1.3. Bifacial Cores.....	36
4.1.4. Bifaces.....	36
4.1.5. Preforms	36
4.1.6. Projectile Points	36
4.1.7. Alternately Beveled Knives	36
4.1.8. Lithic Debitage.....	36
4.1.9. Heat-Treatment	36
4.1.10. Chert Cortex.....	37
4.2. Lithic Material Types	37
4.2.1. Eastern Cherts	37
4.2.2. Western Cherts	38
4.3. Research Objectives.....	40
4.4. Lithic Debitage.....	40
4.4.1. Hypothesis One: Occupation and Abandonment of the Deer Creek Site	40
4.4.2. Hypothesis Two: Decline in Stone Tool Manufacturing Skills.....	43
4.4.3. Hypothesis Three: Florence-A Chert Flakes and a Decline in Heat-Treatment.....	46
4.4.4. Hypothesis Four: Changes in Access to the Florence-A Chert Quarries	48
4.4.5. Hypothesis Five: Florence-A Chert Sources.....	51
4.4.6. Discussion	53
4.5. Deer Creek Chipped Stone Tools.....	53
4.5.1. Bifacial Stone Tools	53
4.5.2. Unifacial Stone Tools.....	56
4.6. Discussion of Chipped Stone Results	59
5. Results from Artifact Analyses: Ground Stone	61
5.1. Artifact Categories	61
5.1.1. Metates or Grinding Basins	61
5.1.2. Manos.....	61
5.1.3. Anvil Stones.....	61
5.1.4. Abraders or Sharpening Stones.....	61
5.1.5. Shaft Abraders.....	61
5.1.6. Polishing Stones.....	61
5.1.7. Hammerstones.....	62

5.2. Ground Stone Material Types	62
5.3. Discussion.....	65
6. Results from Artifact Analyses: Faunal Remains	67
6.1. Introduction.....	67
6.2. Faunal Analysis.....	68
6.3. Preservation.....	71
6.4. Butchering.....	73
6.5. Bone Grease.....	73
6.6. Faunal Inventory	75
6.7. Seasonality	77
6.8. Selective Processing.....	79
6.9. Intra-Site Comparisons	83
6.10. Bone and Shell Artifacts	89
6.10.1. Scapula Hoes (H).....	89
6.10.2. Scapula Expedient Tools (ScExp)	90
6.10.3. Miscellaneous Polished Scapulae (PSC).....	90
6.10.4. Knife Handle (KnH).....	90
6.10.5. Rib Tools (RbT)	91
6.10.6. Hide Grainers (Gr).....	91
6.10.7. Flesher (Fls).....	92
6.10.8. Elk Antler Handle (Ant)	92
6.10.9. Deer Antler Flakers (Fkr)	92
6.10.10. Polished Deer Ulna (PU).....	93
6.10.11. Whistle (Wh)	93
6.10.12. Bone Tubes or Beads (Tb).....	94
6.10.13. Polished Armadillo Plates (PAP).....	94
6.10.14. Split Bone Awls (SBA).....	95
6.10.15. Polished Bone Strip (PBS)	95
6.10.16. Miscellaneous Polished Bone (MPB)	95
6.10.17. Shell Disk Bead (SD)	95
6.10.18. Miscellaneous Modified Shell (MS)	95
6.11. Discussion of Faunal Remains.....	95
7. Results from Artifact Analyses: Plant Remains	97
7.1. Identified Charred Seeds, Rinds, and Nutshell from Deer Creek	98
7.2. Cultivated Plants	98
7.2.1. Corn (<i>Zea mays</i>).....	98
7.2.2. Beans (<i>Phaseolous vulgaris</i>).....	100
7.2.3. Similar to Squash (<i>Cucurbita</i> sp.).....	101
7.2.4. Tobacco (<i>Nicotiana</i> sp.)	101
7.3. Native Wild Plants	101
7.3.1. Sunflower (<i>Helianthus</i> sp.)	101
7.3.2. Little Barley (<i>Hordeum pusillum</i>).....	101
7.3.3. Dropseed (<i>Sporobolus</i> sp.).....	101
7.3.4. Cheno-Ams, Goosefoot, and Pigweed (<i>Chenopodium</i> sp. and <i>Amaranthus</i> sp.)	101
7.3.5. Bedstraw (<i>Galium</i> sp.)	105
7.3.6. Grape (<i>Vitis</i> sp.).....	106
7.3.7. Knotweed/Smartweed (<i>Polygonum</i> sp.).....	106
7.3.8. Purslane (<i>Portulaca</i> sp.).....	106
7.3.9. Pokeweed (<i>Phytolacca americana</i> var. <i>rigida</i>).....	106
7.3.10. Hackberry Seeds (<i>Celtis</i> sp.).....	106
7.4. Other Seeds	106
7.4.1. Black Walnut Nutshell (<i>Juglans nigra</i>)	106
7.5. Wood	107
7.6. Discussion of Plant Remains	107
8. Results from Artifact Analyses: Materials of European Origin	109
8.1. Artifact Categories	109
8.1.1. Gunflints.....	109

8.1.2. Brass and Copper	110
8.1.3. Copper Tinklers.....	112
8.1.4. Iron.....	114
8.2. Other European Manufactured Material	116
8.3. Discussion.....	119
9. Results from Specialized Artifact Analyses	121
9.1. Radiocarbon Dating	121
9.2. Residue Analyses	121
9.3. Genetics Analysis of Coprolite (by Cara Monroe)	121
9.3.1. DNA Investigation and Methods: Mitochondrial DNA and Contamination Control	121
9.3.2. DNA Extraction	123
9.3.3. Post-extraction Molecular Analyses	124
9.3.4. MtDNA Results for Deer Creek Coprolite.....	124
9.3.5. MtDNA Canine Results	124
9.3.6. MtDNA Human Haplotype Results	124
9.3.7. Coprolite Summary.....	126
9.4. Equid DNA and Isotopic Analyses	126
9.5. Discussion.....	126
10. Discussion and Conclusions	127
10.1. Summary of Results.....	127
10.2. Deer Creek’s Fortifications in the Context of the Southern Plains Borderlands.....	129
Appendix A. The Impacts of Vegetation	131
References Cited.....	133