

XI. THE LATE PREHISTORIC IN SOUTHERN TEXAS

The term "Late Prehistoric" is used herein and in most archaeological references in southern Texas to refer to the prehistoric cultural era immediately preceding the onset of historic contact. This period begins around A.D. 1000 in southern Texas and continues until historic contact in the 16th and 17th centuries. The Late Prehistoric era is marked by the introduction of the bow and arrow and pottery over most of southern and central Texas. Other terms such as "Neo-american" (Suhm, Krieger, and Jelks 1954) and "Neolithic" (Prewitt 1981a) refer to this same era.

In comparison with earlier cultural periods such as the Archaic era, the Late Prehistoric is better understood. This is because many Late Prehistoric sites are better preserved than older sites (less time to deteriorate), and they are more visible (closer to the surface), hence more likely to have been found, recorded, and tested. The ethnographic record, although very incomplete, provides some historic documentation of the Late Prehistoric groups and cultural patterns as they rapidly changed after historic contact. Thus, the Late Prehistoric era is the best known prehistoric cultural period in southern Texas prehistory.

PREVIOUSLY DEFINED CULTURAL PATTERNS

A number of Late Prehistoric cultural patterns (variously termed complexes, aspects, foci, or phases) have been defined or hypothesized for south Texas and adjacent regions. Although the southern Texas Late Prehistoric cultural patterns share some similarities with southwest and southeast Texas as well as northeastern Mexico, central Texas provides the most similar and significant comparative data. Hence, the following discussion will review only the cultural patterns relevant to south and central Texas. These are the Central Texas Aspect (Austin and Toyah phases), the Brownsville complex, the Rockport complex, the Turtle Creek phase, and the unnamed Dimmit/Zavala pattern. These Late Prehistoric patterns are based on varying degrees of archaeological study, and some may very well prove to be invalid cultural constructs. A summary of each pattern follows.

CENTRAL TEXAS ASPECT

Major References: Suhm, Krieger, and Jelks (1954); Jelks (1962); and Prewitt (1981a).

Geographical Distribution: Large area of central and south-central Texas, perhaps extending into south Texas.

Material Culture:

Austin phase: **Scallorn** arrow points, small dart points, Friday knives.

Toyah phase: **Perdiz** arrow points, beveled knives, flake drills, end scrapers, bone tools, **Leon Plain** pottery.

Temporal Placement: The Austin phase has been dated to between A.D. 700 and 1300 and the Toyah phase to between A.D. 1300 and 1750 (Prewitt 1981a). Prewitt (1985) has recently suggested that both phases began earliest in northern central Texas and progressively later as one moves south.

Discussion: The Central Texas Aspect has been validated by a large number of excavations. It has been suggested that the Toyah phase can be linked to the historic Jumano (Kelley 1947) or the Tonkawa (Suhm 1959). Jelks (1962:99) suggested that the Toyah phase ended before historic contact.

The Toyah phase has long been recognized as an abrupt change in adaptation. Shafer (1971) and Greer (1976) have suggested that the Austin phase represents the original inhabitants of central Texas while the Toyah phase represents new peoples. The Toyah assemblage has been interpreted as a Plains-like adaptation emphasizing bison hunting (Hester and Parker 1970; Shafer 1971; Prewitt 1981a). Shafer (1971) has suggested that horticulture was introduced into northern central Texas during the Toyah phase and that semipermanent villages may have been established. Ceramic tradewares in the northern and eastern sections of central Texas suggest considerable interaction with eastern and northeastern horticultural groups (Greer 1976).

Recent excavations at the Rowe Valley site (41 WM 437) by the Texas Archeological Society field school have uncovered the largest area yet exposed of a Toyah phase site (Prewitt 1982, 1983, 1984). Field school director Elton R. Prewitt believes that the upper component at the site represents a late Toyah phase occupation (ca. A.D. 1700) by a Wichita speaking Tonkawa group. A circular campsite arrangement is typical of Plains groups. Flintknapping activity areas have been exposed as well as butchering and bone disposal areas. Ceramics recovered at the site indicate trade with protohistoric Caddoan groups. No historic materials have been recovered.

BROWNSVILLE COMPLEX

Major References: MacNeish (1958); Prewitt (1974); Hester and Ruecking (1969); and Mallouf, Baskin, and Killen (1977) contains an excellent summary.

Geographical Distribution: Rio Grande delta of extreme southern Texas (Hidalgo, Willacy, and Cameron Counties).

Material Culture: Sophisticated shell working technology (tools and ornaments), cemetery sites, triangular arrow points, trade contacts with Huastecan and northern Mexico desert areas.

Temporal Placement: The date is unknown but is presumably A.D. 1200-1600.

Discussion: Much of the Brownsville complex is known only from surface collections, principally those collected by A. E. Anderson in the 1930s. Recent researchers have pointed out the need for "considerable refinement" in this cultural construct (Mallouf and Zavaleta 1979:28).

ROCKPORT COMPLEX

Major References: Suhm, Krieger, and Jelks (1954); Campbell (1958); and Corbin (1974).

Geographical Distribution: Confined to a narrow band 20-25 miles wide along the central Gulf coast of Texas from approximately Baffin Bay to the Colorado River.

Material Culture: Perdiz, Fresno, Scallorn, Starr, Padre, and bulbar stemmed arrow points, and Rockport ware ceramics (sandy paste with asphaltum decoration).

Temporal Placement: Approximately A.D. 1000 to the 19th century.

Discussion: Campbell (1958:168) believes that the Rockport focus (complex) can be partially linked to the historic Karankawa groups. In a recent paper certain to be controversial, Herman Smith (1984b) argues that the Karankawa, who he links with the Rockport complex, were recent immigrants (after A.D. 1200) from the Carribean. This argument is based largely on a single linguistic study (Landar 1968) that links a very limited Karankawa vocabulary to the Carib language group. Newcomb (1983:362) has discredited this link in an excellent summary of the Karankawa. Smith fails to provide a single comparison of Karankawa material culture or subsistence to that of the Carib Indian groups. Smith also fails to recognize that Rockport ware ceramics share similarities with upper Texas coast and inland south Texas ceramics (form, bone-tempering, and asphaltum decoration). Excavations at many sites along the coast (Corbin 1974) have shown considerable continuity between the Archaic Aransas focus and the Late Prehistoric Rockport complex. This author would argue that the Karankawa represent native groups whose ancestors can be traced to the Archaic cultures in the area. Further refinement of the Rockport complex is obviously needed.

TURTLE CREEK PHASE

Major Reference: Mitchell (1978).

Geographical Distribution: South-central Texas along the Balcones Escarpment on the southeastern edge of the Edwards Plateau.

Material Culture: Edwards arrow points and Pueblo III trade pottery(?).

Temporal Placement: Poorly established but presumably early in the Late Prehistoric.

Discussion: The Turtle Creek phase as defined apparently reflects the major distribution of the Edwards point. Mitchell believes that it is the initial phase of the Late Prehistoric and predates Scallorn and Perdiz points. This phase has yet to be substantiated by excavation (Black and McGraw 1985).

It does appear likely that the Edwards point is an early arrow point in the area. Recent excavations at the Rainey site, a well-stratified sink hole

site in Bandera County, suggest that **Edwards** points predate **Scallorn** points (Henderson n.d.). However, it should be noted that an untyped crude expanding stem arrow point found at the Rainey site may predate the **Edwards** point.

The main problem with the Turtle Creek phase is that it remains poorly defined. A cultural phase cannot be defined on the basis of a single artifact type. The **Edwards** point and crude expanding stem arrow points clearly represent the initial Late Prehistoric phase in south-central Texas. The definition and understanding of this phase will require further work.

DIMIT-ZAVALA PATTERN

Major References: Hester and Hill (1975); Montgomery (1978); and Hester (1978).

Geographical Distribution: Dimmit and Zavala Counties on the tributaries of the Nueces River.

Material Culture: **Perdiz**, **Scallorn**, **Zavala**, and possibly triangular arrow points, end scrapers, blades, manos, beveled knives, and bone-tempered pottery.

Temporal Placement: The radiocarbon dates generally are late (i.e., A.D. 1450 to 1750), although the Late Prehistoric probably begins in the area somewhat earlier.

Discussion: The Dimmit-Zavala pattern is the result of an intensive study of the area; hence the geographical pattern is actually the boundaries of the study area. This area has two distinctive patterns, one along Tortugas Creek and the parallel Nueces River drainage and the other near the Chaparrosa Creek and the Turtle Creek confluence. One important aspect of the Dimmit-Zavala pattern is the apparent lack of temporal separation between the smaller Late Archaic dart points and the expanding and contracting stem arrow points. It has been suggested that several projectile point forms were in use at the same time (Hester 1975:114).

The preceding references provide data on settlement patterns, subsistence remains, intrasite patterning, and dating. This study area is one of the best known Late Prehistoric occupation areas in the region. Subsistence appears to have been based on plant resources and small mammals, rodents, and reptiles; bison were infrequently killed (probably due to scarcity in the area). Deer and pronghorn were the major large animals.

LATE PREHISTORIC CHRONOLOGY IN SOUTH TEXAS

It has long been recognized that the Late Prehistoric era in central Texas begins with the expanding stem arrow point (**Scallorn**) during the Austin phase. The Toyah phase follows and is marked by the widespread adoption of the contracting stem arrow point (**Perdiz**). In south-central Texas, the Austin phase appears to be predated by occupations characterized by **Edwards**

arrow points and as yet undefined crude expanding stem points (Henderson n.d.). In southern Texas the chronology has been less clear; at many sites, expanding and contracting stem points seem to occur together, leading Hester and Hill (1975:18) to suggest that they were contemporaneous. Recent work in the Choke Canyon Reservoir area (Hall, Black, and Graves 1982; Hall, Hester, and Black 1986) has documented the earlier occurrence of expanding stem arrow point assemblages and the comparatively late occurrence of components with assemblages similar to the Toyah phase materials.

The two best examples of the earlier Late Prehistoric occupation in the Choke Canyon area are two sites in McMullen County, 41 MC 222 and 41 MC 296. At the Skillet Mountain site, 41 MC 222, Scallorn and Edwards arrow points were found with bone-tempered sandy paste ceramics and a large collection of faunal remains, including bison. The radiocarbon dates from 41 MC 222 have a considerable range, however, they best overlap between A.D. 1300-1350. The most important aspect of this is the association of pottery, bison, and expanding stem arrow points at around A.D. 1300. Site 41 MC 296 is important because it has stratified deposits that include an earlier Late Prehistoric component with expanding stem arrow points and a later component with contracting stem arrow points. The radiocarbon dates from the early Late Prehistoric component at 41 MC 296 range from A.D. 800 to 1325 and cluster best between A.D. 1225-1300. The later component clusters nicely between A.D. 1425-1500.

Another Choke Canyon site, 41 LK 201, has a very good late component of the Late Prehistoric with two consistent radiocarbon dates that range between A.D. 1425-1650. This site shares many similarities with 41 JW 8 as well as a number of other sites in southern and central Texas. These similarities are Perdiz points, bone-tempered pottery, small end scrapers, flake drills, beveled knives, and extensive faunal remains, including deer and bison.

The strong similarities between the Choke Canyon and the central Texas Late Prehistoric sequence are very significant. Hall believes that these similarities suggest that central Texas peoples were moving into southern Texas and bringing their distinctive assemblages with them. Prewitt has recently compiled radiocarbon data which supports this interpretation. Prewitt (1985) argues that the Austin and Toyah phases were both introduced to central and southern Texas from the southern Plains (through north Texas) in successive waves. He supports this contention by radiocarbon assays that he believes show the Austin phase beginning in north-central Texas about A.D. 600, in central Texas by A.D. 700, and in south-central Texas by A.D. 850. Similarly, the Toyah phase was first introduced in north-central Texas around A.D. 1250, in central Texas at A.D. 1350, and south Texas by A.D. 1450. Such an explanation would solve the problem of why Late Prehistoric dates in southern Texas have always seemed to fall later than comparable components in central Texas (Hester 1975).

In order to evaluate the relationship between southern and central Texas a brief comparative study was made of selected south and central Texas Late Prehistoric sites. The emphasis was placed on sites in southern Texas that have either a Toyah horizon assemblage or have been radiocarbon dated to after A.D. 1200. Figure 34 shows the location of the sites for which data were compiled. Table 31 provides comparative attribute data for each site.

Selected Late Prehistoric Sites

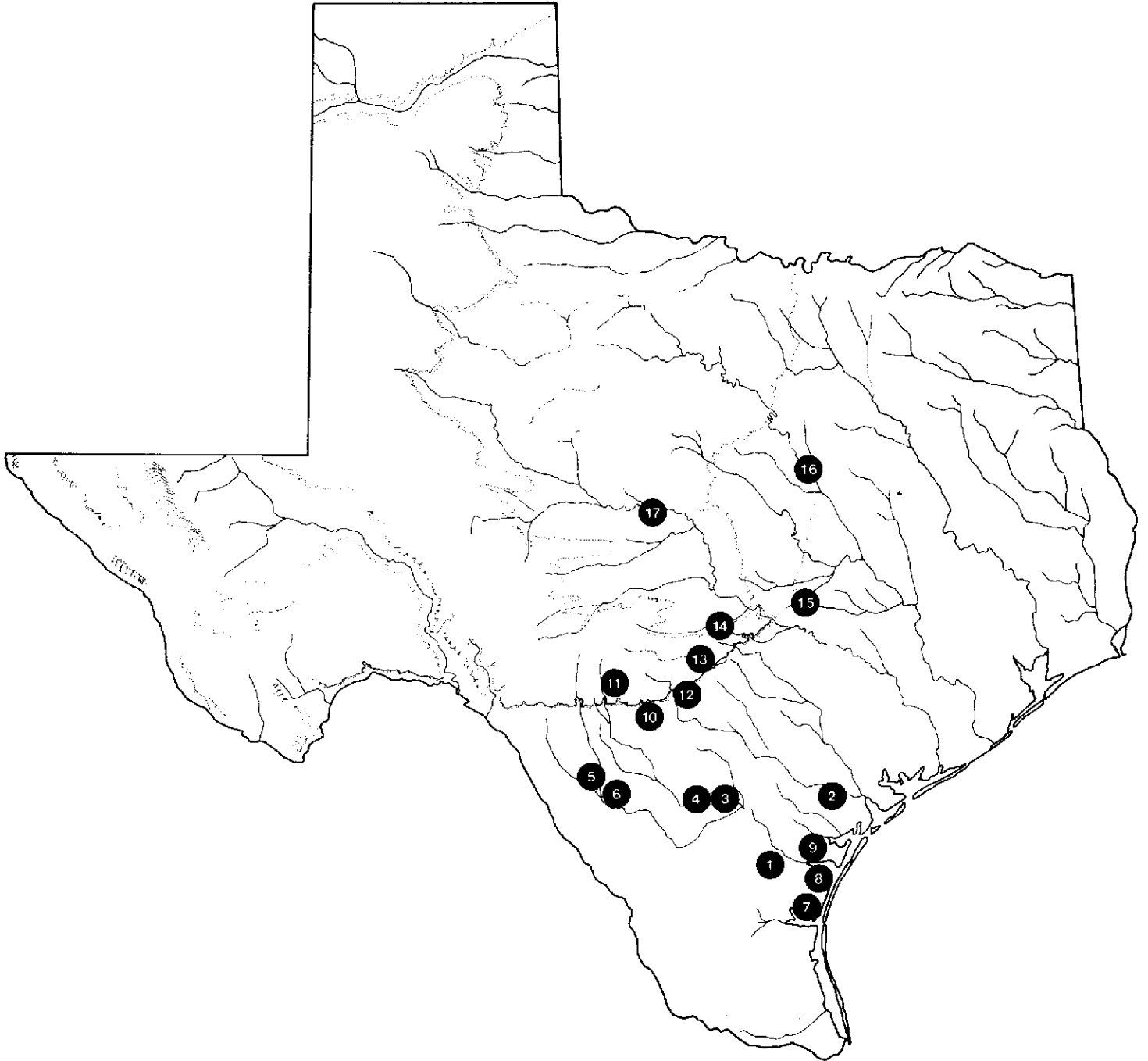


Figure 34. **Location of Select Late Prehistoric Sites.** Refer to Table 31 for identification of each site represented by the numbers on this map.

TABLE 31. COMPARATIVE DATA ON SELECT LATE PREHISTORIC SITES

Map Number	Site	Reference	Archaeological Work	Topographic Location	Components	Lithics					Ceramics			Modified Bone		Faunal							Miscellaneous																					
						Pendix Arrow Points	End Scrapers	Beveled Knives	Bone-Tempered Pottery	Flake Drills	Blade Technology	Scalloped Arrow Points	Triangular Arrow Points	Other Arrow Points	Rockport Ware	Asphaltum	Fugitive Red	Other	Stone Pipes	Bird Bone Beads	Awls/Needles	Utina Flakers	Marine Shell	Deer	Bison	Antelope	Rabbits	Rodents	Birds	Snakes	Fish	Turtles	Mussel Shells	Rabbits	Rock Clusters	Bone Clusters	Living Surfaces (Metallic Concentrations)							
1	Hinojosa Site (41 JW 8)	Hester 1977	S, T, E	C-1	S	x	x	x	x	x	x	a	x	x	x	c	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x						
2	Berclair Site (41 GD 4)	Hester and Parker 1970	S	C-2	S	x	x	x	x	x				x	x	d	x				x	?	?													x	x							
3	41 LK 201	Highley 1986	S, T, E	O-1	M	x	x	x	x	x	?				x	x	a	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x						
	41 LK 67	Brown et al. 1982	S, T, E	U, R-2	M	x	x	x	x	x	x				x																							x	x					
4	41 MC 55	Hall, Black, and Graves 1982	S, T, E	O-1	M	x	x	x	x	x				x	x																						x	x						
	41 MC 222	Hall, Hester, and Black 1986	S, T, E	O-1	S						x	f				x																						x	x					
	41 MC 296	Hall, Hester, and Black 1986	S, T, E	C-1	M	x	x	x	x	x	x					b																						x	x					
5	Mariposa Site (41 ZV 83)	Montgomery 1978	S, T, E	C-1	M	x	x				x	c																											x	?				
6	Tortuga Flat (41 ZV 155)	Hill and Hester 1973	S, T, E	C-1	S	x	?	x	x		x	x																												x	x			
	Spillway Site (41 DM 70)	Hester and Hill 1975	S	O-1	M	x	x	x	x	?	x	x																																
7	Loyola Beach	Hester 1971	S	CD-B	M	x	x	x	x	x	x				x	?	x																							x				
8	Oso Creek Sites Various, including 41 NU 33 and 41 NU 103	Mokry, personal communication Steele and Mokry 1985	S, T	C-1	M	x	x	x	x	x	x				x	x	?																							x				
9	41 SP 68	Chandler, personal communication	S	C-1	M	x	x	x	x	x	x	b				?	x	x	a																									
10	41 ME 19	Hester and Kelly 1976	S, T	C-1	S	x		x	x	?	x																																	
11	Rainey Site (41 BN 33)	Henderson n.d.	S, T, E	SH	M	x	?	x	x	x	?	x	g																												x	x		
12	Panther Springs Creek Site (41 BX 228)	Black and McGraw 1985	S, T, E	C-1	M	x	x	x	x	x	x	b																														x	x	
13	Oblate Rockshelter (41 CM 1)	Johnson, Suhm, and Tunnell 1962	S, T, E	RS, C-1	M	x	x	x	x	x	x																																	
14	Wheatley Site (41 BC 114)	Greer 1976	S, T, E	U, C-2	M	x	x	x	x	x	x	a																														x	x	
15	Rowe Valley (41 WN 437)	Frewitt, personal communication, 1982, 1983, 1984	S, T, E	R-1	M	x	x	x	x	x	x	a				x	d																									x	x	x
16	Kyle Site (41 HI 1)	Jelks 1962	S, T, E	RS	M	x	x	x	x	x	x	d																															x	
17	Finis Frost Site (41 SS 20)	Green and Hester 1973	S	C-1	S	x	x	x	x	x	x																																	

NOTE: The map numbers for each site (or group of related sites) are shown in Figure 34.

KEY: Archaeological Work: S=surface, T=testing, E=excavation
 Topographic Location: R=river, C=creek/stream, O=oxbow slough, CD-B=clay dune/bay shore, U=upland (or high terrace), RS=rockshelter, SH=sink hole, -1=0 to 100 meters, -2=100 to 200 meters
 Components: S=single component, M=multicomponent
 Other Arrow Points: a=atypical expanding stem, b=Edwards, c=Zavala, d=straight stem, e=Sabinal, f=b and d, g=a, b, and e
 Other Ceramics: a=pipe bowls, b=figurines, c=a and b, d=brushed, incised and/or punctated
 Marine Shell: x=present, function unknown, a=ornaments, b=tools, c=a and b

Table 32 provides a list of Late Prehistoric radiocarbon assays from south Texas. Figure 35 plots all 33 of the calibrated dates from Table 32. Figure 36 shows the dates which can be linked to the expanding stem arrow point (Austin horizon) and those which can be linked to the contracting stem arrow point (Toyah horizon). The use of the term "horizon" will be explained later.

In general, the attributes of Late Prehistoric Toyah phase sites in central Texas are found at many sites in south Texas. Major differences, other than sampling problems, are few. South Texas sites almost always have the 2-beveled knife rather than the Plains 4-beveled knife (Brown *et al.* 1982). South Texas sites also have more marine shell artifacts and pottery with asphaltum and/or fugitive red decoration. Central Texas Toyah sites often have traces of trade ware from eastern Texas (particularly late Caddoan wares). In addition, domesticated corn has been found at a few central Texas sites (Jelks 1962; Shafer 1971; Harris 1985) suggesting that some horticulture may have been practiced. Other differences are minimal. Sites from both regions have a wide variety of animal species in faunal assemblages. The most important food species is invariably either deer or bison. It is difficult to compare the Late Prehistoric sites from south and central Texas without concluding that the two regions are closely linked.

If the southern Texas Late Prehistoric is indeed strongly linked with central Texas peoples, then the cultural constructs of the region need to be reassessed. Archaeologists working in south Texas have avoided using the central Texas phase designations for many years, even though the Late Prehistoric materials they found were often very similar to those found in central Texas. This reluctance stemmed from differences in radiocarbon dates and associated materials as well as settlement patterns. Another problem in linking the two areas is precisely because the two areas are considered separate cultural regions.

Figure 35 shows 33 calibrated radiocarbon dates from Late Prehistoric sites in southern Texas. These form a very even distribution when arranged by the earliest end member of each date range. Although a few dates range before A.D. 1000, the majority range after A.D. 1050. Similarly, although a few dates range after A.D. 1600, most are before A.D. 1525. Figure 36 shows the 30 dates which can be assigned to either the Austin horizon or the Toyah horizon. Although considerable overlap occurs, the majority of the Austin horizon dates clearly cluster earlier than the majority of the Toyah horizon dates. The dashed horizontal lines show the approximate main cluster range for each horizon. Most of the Austin horizon dates fall between A.D. 1075 and 1375. The majority of the Toyah horizon dates fall between A.D. 1300 and A.D. 1600. Thus, the dichotomy between expanding stem and contracting stem arrow point assemblages long defined in central Texas is also evidenced in southern Texas.

It should be pointed out that the radiocarbon dates used to illustrate the Austin/Toyah dichotomy in south Texas are all from 41 JW 8 or the Choke Canyon sites. The dates from mixed assemblages in western south Texas (assay numbers 31-33 in Table 32) are very late. It is likely that the Austin and Toyah horizons may not have spread intact into many areas of south Texas. We do not have radiocarbon data from much of southern Texas; thus, the

TABLE 32. LATE PREHISTORIC RADIOCARBON ASSAYS FROM SOUTH TEXAS

Assay Number	Site	Association	Sample Number	Assay	Calibrated Range
1	41 JW 8	Toyah	TX-2207	580 ± 50	1285-1415
2	41 JW 8	Toyah	TX-4652	520 ± 90	1280-1500
3	41 JW 8	Toyah	UGa-4511	525 ± 65	1330-1430
4	41 JW 8	Toyah	TX-4653	970 ± 60	905-1215
5	41 JW 8	Toyah	TX-4886	1090 ± 110	660-1160
6	41 JW 8	Toyah	UGa-5289	655 ± 70	1255-1400
7	41 JW 8	Toyah	UGa-5280	930 ± 70	925-1235
8	41 JW 8	Toyah	TX-4654	500 ± 60	1335-1480
9	41 JW 8	Toyah	TX-4887	700 ± 80	1200-1405
assays 1-9 presented in this report					
10	41 MC 222	Austin	TX-2875	700 ± 150	1050-1420
11	41 MC 222	Austin	TX-2876	710 ± 50	1230-1340
assays 10-11 from Hall, Black, and Graves (1982)					
12	41 MC 222	Austin	TX-4666	360 ± 60	1415-1645
13	41 MC 222	Austin	TX-4694	540 ± 60	1325-1425
14	41 LK 201	Toyah	TX-4667	360 ± 50	1415-1645
15	41 LK 201	Toyah	TX-4668	320 ± 60	1425-1655
16	41 MC 296	Toyah	TX-4677	430 ± 80	1340-1645
17	41 MC 296	Toyah	TX-4678	330 ± 60	1420-1655
18	41 MC 296	Toyah	TX-4682	450 ± 60	1390-1505
19	41 MC 296	Toyah	TX-4683	290 ± 50	1435-1665
20	41 MC 296	Toyah	TX-4684	320 ± 60	1425-1655
21	41 MC 296	Austin	TX-4685	780 ± 60	1190-1315
22	41 MC 296	Austin	TX-4686	750 ± 70	1210-1330
23	41 MC 296	Austin	TX-4687	1110 ± 60	785-1035
24	41 LK 128	Austin?	TX-4674	1030 ± 70	885-1155
25	41 LK 128	Austin	TX-4671	830 ± 50	1055-1270
26	41 LK 128	Austin	TX-4670	660 ± 50	1250-1395
27	41 LK 128	Austin	TX-4665	830 ± 60	1055-1270
28	41 LK 128	Austin	TX-4676	670 ± 60	1245-1395
29	41 MC 55	Toyah	TX-4692	460 ± 60	1385-1500
30	41 MC 55	Toyah	TX-4693	760 ± 80	1055-1350
assays 12-30 from Hall, Hester, and Black (1986)					
31	41 ZV 83	?	TX-1526	430 ± 60	1400-1515
assay 31 from Montgomery (1978)					
32	41 ZV 155	?	TX-1514	170 ± 60	1640-1950
33	41 ZV 155	?	TX-1515	410 ± 40	1405-1605
assays 32-33 from Hill and Hester (1973)					

Note: The assay number is the number used in Figures 35 and 36. The Association is based on the central Texas Late Prehistoric phases (Jelks 1962; Prewitt 1981a). The assays are given in years B.P. (1950). The Klein calibration range is the two-sigma range given in years A.D. (Klein et al. 1982).

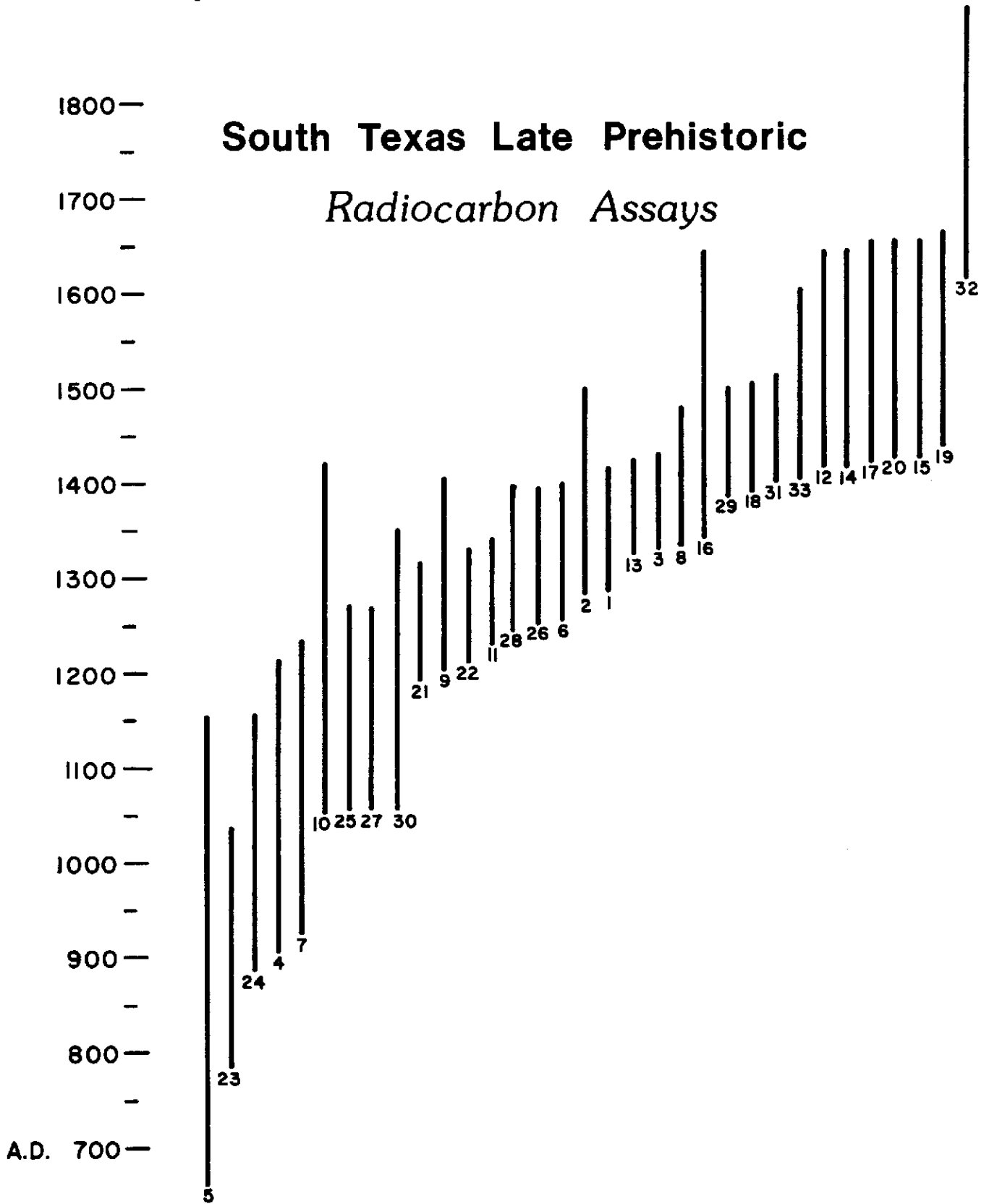


Figure 35. South Texas Late Prehistoric Radiocarbon Assays.

South Texas Late Prehistoric Horizons

Radiocarbon Assays

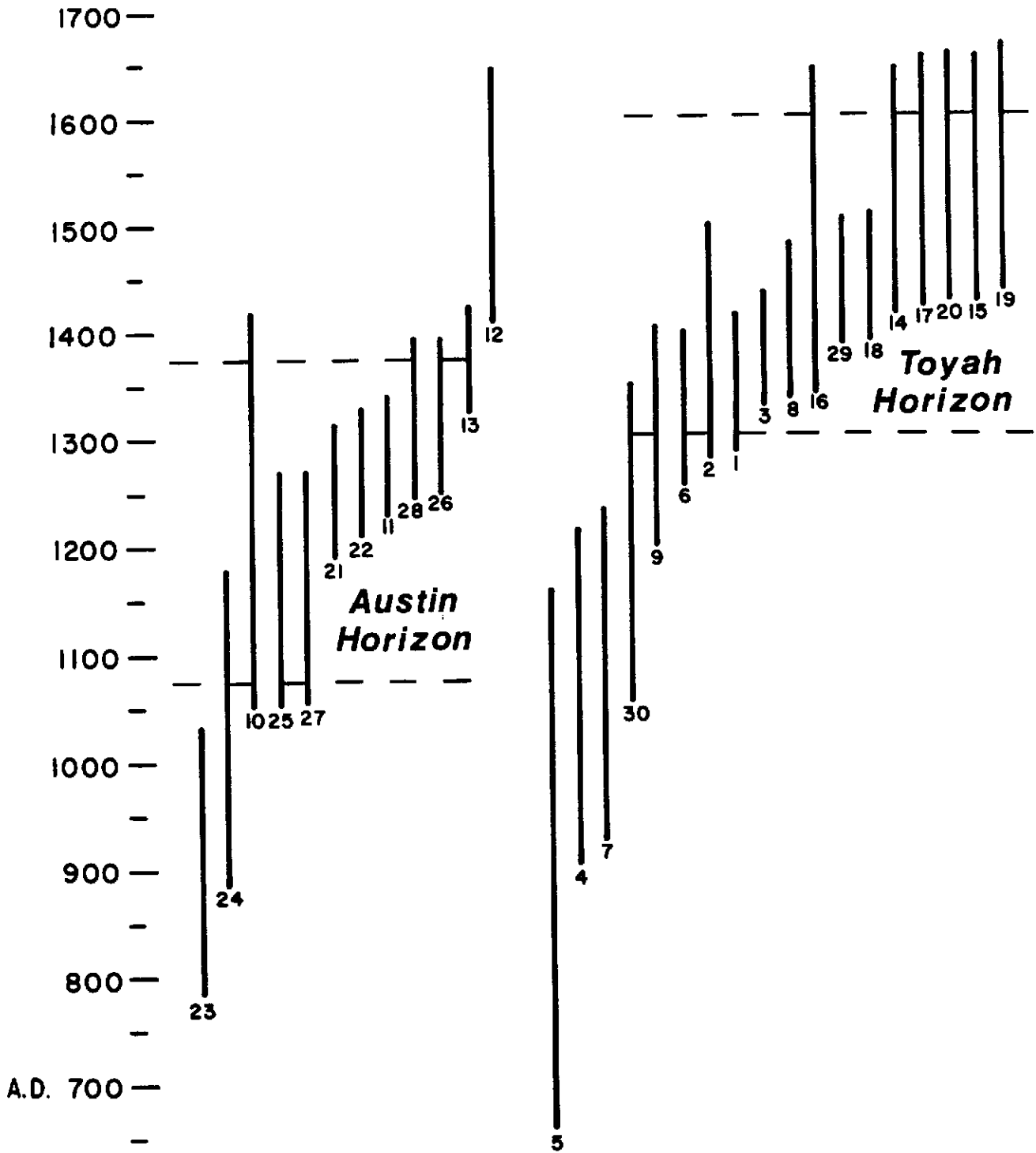


Figure 36. Radiocarbon Assays of Late Prehistoric Horizons in South Texas.

chronology of the southern Texas Late Prehistoric needs considerable refinement. This refinement can only come from a much larger sample of radiocarbon assays from isolated components.

The Late Prehistoric radiocarbon data from south Texas suggests that Prewitt's estimates of when the central Texas phases (horizons) spread south may need to be modified. For example, Prewitt's (1985) estimate of the beginning of the Austin phase in his south cluster (which includes south-central Texas) is A.D. 850. The Austin horizon does not appear to be present in the Choke Canyon area until after A.D. 1000. The Toyah horizon, on the other hand may be present in south Texas 150 years earlier than Prewitt's estimate of A.D. 1450. These differences may reflect the lack of an adequate sample of radiocarbon assays. Prewitt's contention that Late Prehistoric dates generally begin later in south Texas does seem to be borne out by the south Texas data.

The following section will focus on the later part of the Late Prehistoric era in southern Texas and the cultural assemblage that has been defined as the Toyah focus (Jelks 1962) or phase (Prewitt 1982, 1985) of central Texas. It will be argued that this same assemblage is present in many areas of south Texas and represents a movement of central Texas cultural patterns and/or peoples into southern Texas after A.D. 1350. The southern Texas sites with the Toyah-like assemblages are examples of a very broad cultural pattern that stretched over a several hundred year period, from far north-central Texas to far west-central Texas to deep southern Texas. It will be argued that this cultural pattern is perhaps best described as a **horizon** rather than a phase in recognition of the widespread nature of the pattern.

THE TOYAH HORIZON

A number of sites in southern Texas have been found which have Late Prehistoric components that can be closely linked to the Toyah phase of central Texas. The Hinojosa site, for example, has an artifact assemblage that save for a few minor differences could have been recovered from a central Texas Toyah rockshelter. The sites with Toyah-like components are the Kyle rockshelter in Hill County (north-central Texas), the Finis Frost site in San Saba County (west-central Texas), the Rowe Valley site in Williamson County (central Texas), the Berclair site in Goliad County (eastern south Texas), and the Hinojosa site in Jim Wells County (deep south Texas). The artifacts common to these and other sites are **Perdiz** arrow points, bone-tempered pottery, beveled knives, small end scrapers, and flake drills. All of these sites also appear to have bison bone.

These similarities have been pointed out elsewhere (Hester and Parker 1970) and have long been recognized. In the 41 JW 8 proposal (Hester, Eaton, and Black 1980) we used the concept of the "bison-corridor" to suggest that the Toyah-like sites in southern Texas were the campsites of groups who followed the bison herds from central Texas. It was noted that these sites do not occur in the western part of south Texas toward the Rio Grande, in the lower Rio Grande Valley, or south of Jim Wells and Nueces Counties. We noted that the widespread occurrence of bison after A.D. 1300 fits Dillehay's (1974)

model of periodic movement of bison out of the central and upper southern Plains and into the lower southern Plains.

The close similarity of many sites across a very large geographical area has created a problem with the constructs used to encompass these culturally related sites. Why not call all of these sites by a single term given the widespread similarity? The most obvious choice is the Toyah phase. However, this phase was originally defined and has remained defined for central Texas only. Thus, archaeologists working in the region have used the more general term "Late Prehistoric" to avoid using a more specific term that had not been defined for south Texas. The time has come to recognize that we are definitely dealing with a single cultural tradition marked by innovative technological changes that were adopted over a very wide area within a few hundred years.

Prewitt (personal communication) believes that the phase concept should be expanded to allow for a cultural phenomena that is found over several cultural regions. Thus, he would term southern Texas sites like 41 JW 8 "Toyah phase" sites. This author has previously argued (Black and McGraw 1982, 1985) that the phase concept as applied to central Texas by Weir (1976) and Prewitt (1981a) far exceeds the original intention of the concept. Willey and Phillips (1958) suggested that phases be applied to cultural regions which they believed should be restricted to relatively homogeneous geographical regions. Central Texas and south Texas are composed of a number of major geographical areas such as the Edwards Plateau, the Balcones Escarpment, the Gulf Coastal Plain, and the Blackland Prairie. If the application of the phase concept to central Texas is questionable, the extension to cover much of southern Texas is clearly stretching the phase concept far beyond its definition.

Perhaps, as Prewitt suggests, the time has come to redefine the phase concept to allow for just such a large geographical area. This author believes this is unnecessary; a concept already exists that can be applied to the problem, the "horizon."

The term "horizon" and its temporal counterpart, the "tradition," were thought by Willey and Phillips (1958:30) to be "the most practical means for effecting cultural-historical integration on a geographical scale larger than that of the region." They define "horizon" as "a primarily spatial continuity represented by cultural traits and assemblages whose nature and mode of occurrence permit the assumption of a broad and rapid spread" (*ibid.*:33). They go on to note that while the site components (or other archaeological units) linked by a horizon are assumed to be contemporaneous, the temporal relationship may in fact be expected to be "sloped" rather than "horizontal." This provision recognizes that it takes some time for a cultural pattern to spread.

It is suggested that sites with artifact assemblages very similar to the central Texas Toyah phase materials in southern Texas, represent the spread of a cultural "horizon." It is interesting to note that most of the Toyah horizon sites in southern Texas occur 100-200 years after the Toyah phase begins in northern central Texas. This is an excellent example of the "sloped" temporal relationship during the spread of a horizon. It is also

significant to note that certain changes in the assemblage do occur as the Toyah horizon spreads into south Texas. For example, the beveled knife form found in central Texas is the bipointed, diamond-shaped "Plains Knife" or "Harahey" biface, while the beveled knife form in southern Texas is the "2-beveled quadrilateral biface" (Brown et al. 1982). Another example is the use of asphaltum and hematite for pottery decoration in southern Texas. These forms of decoration are generally absent from central Texas.

Although the concern here is with the Toyah horizon in southern Texas, similar assemblages also occur west and east of central Texas. The widest distribution is that of the Perdiz arrow point. Prewitt (1981, 1985) uses the Perdiz point as a "key index marker" of the Toyah phase. The Perdiz point can similarly be used as a "horizon marker" (Willey and Phillips 1958) to define the maximum spread of the horizon. In the case of the Toyah horizon, the Perdiz point had a wider distribution than most other elements of the assemblage. A distribution map of Perdiz points (Prewitt ms.) indicates a range across most of Texas from the northeast corner, to the southeast corner, to 41 JW 8 and farther south, and to the Big Bend area in west Texas.

Obviously, one cannot use the Perdiz point distribution alone to define the spread of the Toyah horizon. There are indications that most of the elements of the Toyah horizon also spread far west and southwest from central Texas. As one moves farther away from the apparent initial Toyah area, north-central Texas (Prewitt 1985), the assemblage becomes progressively more modified, no doubt indicating influences from other cultures. At the Finis Frost site in San Saba County (Green and Hester 1973), the Toyah assemblage is complete. Farther west in the Big Bend region, Perdiz points, end scrapers, and beveled knives occur but bone-tempered pottery and flake drills apparently do not (Kelley, Campbell, and Lehmer 1940). Lehmer (1960:125-126) includes these materials in the Livermore focus which he suggests originated in the southwestern Plains. He notes how this complex sharply contrasts with others in the area and speculates that this "appears to represent a group of late plains hunters who were driven to take refuge in the mountain country by severe drought" (*ibid.*:126). South of the Big Bend region across the Rio Grande in Coahuila, Mexico, the Perdiz point and small end scrapers are found within the Jora complex (Taylor 1966).

It is suggested that the appearance of the expanding stem arrow points across much of southern Texas after A.D. 1000 can also be interpreted as the spread of the "Austin horizon." However, unlike the Toyah horizon, the expanding stem arrow point assemblages do not appear to have a well-defined tool kit that is unique to the related sites. It is interesting to note that ceramics in south Texas appear to have been initially introduced into the area along with expanding stem arrow points. This can be seen at several sites in the Choke Canyon area, including 41 MC 222, 41 MC 296, and possibly 41 LK 128 (Hall, Black, and Graves 1982; Hall, Hester, and Black 1986). Greer (1976:149-152) has suggested that ceramics may have first appeared in central Texas during the Austin phase. Ceramics have recently been found in apparent association with Scallorn and Edwards arrow points in south-central Texas at 41 BX 228 (Black and McGraw 1985).

It should be mentioned that expanding stem arrow points have been recently recognized as a minor component of Toyah horizon assemblages. The expanding stem arrow points found in isolated Toyah components are atypical of the well-defined expanding stem types, the **Scallorn** and the **Edwards** arrow points. The atypical expanding stem points are typically smaller and thinner than most **Scallorn** and **Edwards** arrow points and often have very angular stems. These have been documented at 41 JW 8, at Rowe Valley (Prewitt ms. and personal communication), and at 41 LK 201 (Highley 1986). At many sites, atypical expanding stem arrow points have been classified as **Scallorn** points. For example, atypical expanding stem arrow points were found at the Wheatley site, 41 BC 114 (Greer 1976). Greer (1976:108) notes that the sample of 13 "**Scallorn**" points at the Wheatley site "is a heterogeneous grouping of points generally comparable to **Scallorn** forms." The illustrations in the Greer (1976) report show a very diverse group of points, few of which are typical of the defined type (Suhm and Jelks 1962:285-286). Greer (1976:141-147) uses the cooccurrence of the expanding stem arrow points and typical Toyah assemblage materials (**Perdiz** points, end scrapers, beveled knives, and pottery) to argue that **Perdiz** and **Scallorn** points, and by extension, the Toyah and Austin phases, were contemporaneous. Greer points out that virtually any expanding stem arrow point in Texas is usually called a "**Scallorn**" (except for **Edwards** points, of which he makes no mention). The recognition of atypical expanding stem points in definitely late contexts calls for the reexamination of expanding stem arrow point typology.

Further comments on the Toyah horizon in southern Texas are made in the following section of this report.