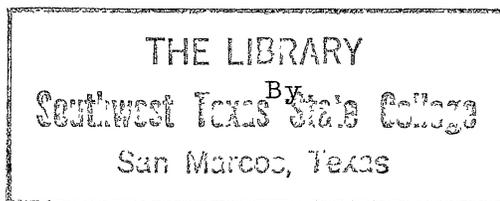


A HISTORY OF THE CROSS TIMBERS IN TEXAS
INCLUDING THE HISTORICAL CARTOGRAPHY

THESIS

Presented to the Graduate Council of
Southwest Texas State College
in Partial Fulfillment of
the Requirements

For the Degree of
MASTER OF ARTS



Charles Oliver May, Jr., B. A.
(San Antonio, Texas)

San Marcos, Texas

May 1962

1962

P R E F A C E

My interest in this subject, the Cross Timbers, was developed over a period of two years of study in the fields of Texas history and the history of western expansion in the United States. A curiosity arose when reference to the Cross Timbers began to appear in the many publications read during the course of events. As V. E. Gibbens has said: "The Cross Timbers excited great interest and are almost without exception mentioned in early books on Texas as a curious physical feature of the country."¹

The progress of researching this study was stimulated when it became obvious that each institution which came in contact with the Cross Timbers left something for future generations to discover. The Spanish conquistadores were not really concerned about this area, and, in fact, took drastic steps to close the frontier. The early Anglo-Americans learned of the Cross Timbers but continued to avoid the position as a physical hazard. During the

¹V. E. Gibbens, (ed), "Lawie's Trip to Northeast Texas, 1854-1855." Southwestern Historical Quarterly, XLVIII, p. 247n.

period of the Texas Republic, 1836-1845, many books were published to encourage immigration by describing the unknown areas of Texas, and some data was printed about this landmark. After the Texas annexation in 1845, the United States showed interest by sending military explorations westward to establish wagon roads or routes for railroads. These activities did not reveal all the facts concerning the Cross Timbers. The studies in geology were delayed until the close of the nineteenth century when Robert T. Hill visited the area and discovered new data for his publications.

A graphical description of the Cross Timbers led to an additional investigation which resulted in a cartographical presentation. This research was considered important enough to include in this paper as Part II. The cartographic section includes examples of maps, charts, and sketches which display the Cross Timbers from the earliest date to the end of the nineteenth century.

The preparing and writing of a paper of this type usually requires the assistance and guidance of many people. This paper is no exception. I shall forever be indebted to Dr. William C. Pool, Professor of History, Southwest Texas State College, San Marcos, Texas, for his perseverance,

counseling, and sound judgment in guiding me in the preparation of this document and without whose help, satisfactory results could never have been attained. The author would also like to indicate something of his indebtedness to those who have influenced his thinking by naming several who are most likely to find portions of their own thought included in this paper. This list would include: Dr. Leland E. Derrick, Dr. James Taylor, Dr. Emmie Craddock, Dr. Jerome W. Stone of Southwest Texas State College, Dr. Joseph W. Schmitz of St. Mary's University of San Antonio, Texas, Dr. William H. Timmions of Texas Western College of El Paso, Texas. The following people are to be recognized for their patience in tolerating my determination in this study: Mrs. Osborn, of the Texas State Archives, Austin, Texas; Dr. Llerna Friend, of the Barker History Center, The University of Texas Library; and Mr. Walter Hanak, of the archives of The University of Texas Library. The successful completion of this study would have been virtually impossible without the assistance of these dedicated people.

T A B L E O F C O N T E N T S

Chapter	Page
Part I	
I. INTRODUCTION	1
II. THE ORIGIN OF THE CROSS TIMBERS	9
III. AMERICAN BISON	42
IV. FROM SAVAGE TO SETTLER	61
V. CONCLUSIONS	104
Part II	
THE HISTORICAL CARTOGRAPHY OF THE CROSS TIMBERS . . .	111
A. Introduction and Explanation	111
B. Cartographic History	122
BIBLIOGRAPHY	180
ANNEX A	193

L I S T O F I L L U S T R A T I O N S

	Page
A. Plant	
(1) Post Oak	35
(2) Blackjack Oak	36
(3) Common Hackberry	37
(4) Overcup Oak	38
B. Animals	
(1) Trachodon Track (Dinosaur)	41
(2) American Bison	42
C. Development of the Cross Timbers, 1840-1960	
Figure A	109

L I S T O F M A P S

(Cartography)

Enclosure

A. Sketches

(1) Spanish Sketch	1
(2) Austin's Sketch (Indians)	2
(3) Austin's Sketch (Directions)	3
(4) Route of Military Road (Upshur)	9
(5) Provinces & Minor Subdivisions (Bray)	29

B. Charts

(1) Drawing by Austin	4
(2) Texas & Part of Mexico (Kendall)	13
(3) Reconnoissances Routes (Whiting)	18
(4) Topographical Map (Marcy)	19
(5) Map of the Country (Marcy)	20
(6) Trans-Mississippi West (Warren)	30

C. Maps

(1) Map of Texas (Tanner)	5
(2) Map of Western Territory	6
(3) Map of Texas (Lee)	7
(4) Texas (Stiff)	8
(5) Map of Texas (Arrowsmith)	10

C. Maps (Continued)	Enclosure
(6) Texas (Bradford)	11
(7) Map of Texas (Emory)	12
(8) Map of Texas (Congressional)	14
(9) Part of North East Texas (Moody)	15
(10) Map of Texas (Moody)	16
(11) De Cordova's Map of Texas	17
(12) Colton's Map of Texas	21
(13) Roessler's Map of Texas	22
(14) Colton's New Map of Texas	23
(15) Agriculture Map of Texas (Loughridge)	24
(16) Density of Forest (Sargent)	25
(17) Salient Topographic Features (Hill)	26
(18) Map of Eastern and Western Cross Timbers (Hill)	27

P A R T I

C H A P T E R I

INTRODUCTION

A. Orientation

The Cross Timbers, in general, is a geographical term denoting a strip of forest growth located in the center of northern Texas, a timber belt that forms a natural boundary between the productive agricultural lands of the east and the arid waste lands of the west. As an unconventional strip of trees, it was situated in a north-south direction, or in opposition to the normal flow of rivers in that area, and presented an obstacle to the usual east-west migratory movement. Captain Randolph B. Marcy,¹ who explored this area, stated in his 1852 report: "This extensive belt of woodland forms one of the most prominent features upon the face of this country."² He added that

¹Thomas H. S. Hamersly, Complete Regular Army Register, p. 603. (Marcy rose to the rank of Brigadier General in 1861).

²Randolph B. Marcy, Exploration of the Red River of Louisiana, in the year 1852, Senate Executive No. 54, 32d Congress, 2d Session, p. 85.

"from the point where the Red River leaves the timbered lands, the entire face of the country, as if by the wand of a magician, suddenly changes its character."³

Great historians such as Frederick Jackson Turner and Walter Prescott Webb have considered the importance of this area. Turner, the dean of the frontier theory, included the line of arid lands, approximately the ninety-ninth meridian, as one of the major frontiers which felt the force of civilization in the process and development of the history of our country. Like the Alleghany Mountains and the Mississippi River, this timber line, too, was an obstacle which was eventually won by a series of Indian wars.⁴ Webb contrasts the Great Plains with this timber land and found what he called an institutional fault (comparable to a geological fault) from the middle of Texas north, roughly following the ninety-eighth degree meridian. Webb states: "At this fault the ways of life and of living change. Practically every institution that was carried across it was either broken and remade or else greatly

³Marcy, Exploration of the Red River, p. 85.

⁴Frederick Jackson Turner, The Frontier in American History, p. 9.

altered."⁵ Robert Thomas Hill had earlier pointed out that portions of this area did constitute a geological fault.

A century ago the Cross Timbers was represented as an area located in Texas between the ninety-seventh and ninety-ninth meridians, which consisted of a single strip of trees growing in a straight northerly direction. The maps indicated that the lower edge of the timber belt commenced near the city of Waco on the Brazos and extended due north into the region of the Indian Territory (now Oklahoma). Until about 1840 the Cross Timbers was literally free to develop in any manner elected by the forces of nature, but for some strange reason an unusual formation developed. Efforts have been made to resolve the question in geological terms, others have considered the annual rainfall, and some have given up by expressing the construction as the result of an unknown race of men. The question raised here was why not consider the development of the Cross Timbers in terms of its own environment? This approach would be an area not heretofore considered as a means of the development of the phenomenon.

⁵Walter Prescott Webb, The Great Plains, p. 8.

The trail left by the wild beast, followed by the Indians and later by the white man reveals the influence of the Cross Timbers upon our present civilization as now expressed in the elaborate highway systems. Turner expresses this progressive movement in the same manner. "The buffalo trail becomes the Indian trail, and this became the trader's 'trace;' the trails widened into roads, and the roads into turnpikes, and these in turn were transformed into railroads."⁶ We find that each phase of institutional history that experienced some form of prosperity in this paradise has used the Cross Timbers as its boundary. So it is today that we use the super highways now located in a north-south direction, passing near but avoiding that area once known as the Cross Timbers.

B. The Cross Timbers as a Boundary

The Cross Timbers serves as a boundary in terms of vegetation in the center of Northern Texas. This forest sheltered the American Bison, provided a fortress for the Caddo Indian, and exerted a continuous effect upon

⁶Turner, Frontier in American History, p. 14.

the institutions in which it came in contact. In many places the forest was so thick that it could be penetrated only with a great deal of difficulty, and many used a guide.

The buffalo traveled from Texas to Canada using the edge of the forest as their eastern boundary, moving south each winter and following the green grass northward the next spring. This annual movement was further encouraged by the presence of salt deposits. The salt licks located in and near the Cross Timbers attracted both man and animals. The first Indians to dwell within this area claim a heritage which links with all the American Indians. The Indians' main attraction to this area was the buffalo. Initially he followed the animal on foot into the narrows of the forest where it was an easy prey. After mounting the horse, the Comanche raced along the same established direction, following the meat supply. The nomadic savage dominated all within his sphere. Like the dense forest, the hostile Indian discouraged civilization and added to the hazards of the frontier.

When the civilized man arrived on the scene, he too traveled in a north-south direction up and down the Cross Timbers. In 1541 the Spanish explorers were searching for the gold in the seven cities of cibola within this

area. The Americans invaded Texas and, after 1836, under the flag of the Republic, took progressive steps to clear the Southwestern frontier for settlement. By 1840 action was initiated which caused the Cross Timbers to become a rather popular location for settlement. When the Indian was forced to move further west onto the prairie the settlements began to develop. A combination of the extermination of the buffalo and the white man's progress has led to a major change in the area once known as the Cross Timbers.

C. Restrictions and Limitations

The Cross Timbers was essentially a timber belt, and, as such, was subject to many different external forces-- all of these factors and forces can not be definitely fixed. Therefore, the nature of the material must be considered as somewhat transitory. The available material which is best known were only understood during certain phases of recorded history. The Cross Timbers, as described and established in the early period is considerably different in size, shape, and density from that which is described of a later era. What is considered to be complete, accurate, and a detailed description has

suffered many modifications over the changing course of time. The professional background of the different explorers, map-makers, and authors has tinted their reports, and a variety of subjects has been influenced by this fact. As a result, the Cross Timbers presents an interesting subject for environmental and institutional history.

Several institutions have possibly made major influences upon the Cross Timbers, however, there exists only circumstantial evidence to verify that such activity took place. It is appropriate, at this time, to point out several of these flexible forces, such as: the pattern of the action made by buffalo which can not be fully appreciated in view of the tremendous number and the effect of their trampling hooves; as noted before, the Indian moved with these herds and used grass fires as traps to capture the animals, and these fires hindered the growth of trees; the pioneer settler with his useful axe began to reduce the forest to meet his requirements for fuel, shelter, and farmland.

The unknown factor which affects the environment within the Cross Timbers has been that common variable known as the weather conditions. This influence follows no specific law, but has a definite effect upon the

historical growth and development of the region. During the humid season a prolific crop of acorns is produced and spreads potential trees over a larger area. The reverse is true during a drought, when seed development is retarded, and the expansive cycle is subdued.

Early visitors to the Cross Timbers did not make frequent, periodic, and continuous sojourns into the area. The traders and trappers that spent time near the region provided little or no data of historical significance. Therefore, we have several gaps or periods where an absence of information hinders a complete and continuous study of the Cross Timbers. A general fear of the area may have caused investigations to be delayed or temporarily postponed. Early expeditions indicated that this forest marked the end of habitable land and the beginning of the arid desert. The impact of this force combined with the Indian menace further discouraged the westward advance of the line of settlements. The temptation to move into the Cross Timbers could not be suppressed, and the early pioneers were met with unexpected disease and misery. Then, the Indians were still present to continue their depredations even while expeditions approached to record the topographical maps.

C H A P T E R I I

THE ORIGIN OF THE CROSS TIMBERS IN TEXAS

A. The Physiography¹

The search for an answer to the question of physiography and of just how the Cross Timbers originated has been complicated by the many different theories which have been presented over the years. Man's interest in this natural phenomena was attracted by its unique position in a north-south direction, and because it was set apart from its surroundings. The major rivers and streams in Texas generally flow in a southeast direction or perpendicular to this unusual forest. These trees grew on the uplands or on top of the hills; whereas one would expect this larger vegetation to be confined to the moist valleys or river bottoms as most other groups of trees in West Texas. The flat rolling plains extended right to the immediate edge of the Cross Timbers, thereby emphasizing a

¹Physiography aims to give a correct description and a rational explanation of the original land forms, such as valleys, plains, mountains, or other relief features, large or small. From the book, J. A. Udden, C. L. Baker, and Emil Bose, Review of the Geology of Texas, Bulletin of The University of Texas, No. 44, p. 2.

visual contrast. It was pointed out previously that, historically, the Cross Timbers represents a frontier and serves as the dividing line between the arid western land and the habitable area of the east.²

One of the earliest descriptions of the Cross Timbers was made in 1568 when David Ingram, an English traveler, commented about the great woods. Writing in his journal, Ingram remarked that, "Great huge woods of [various] kinds of trees. . . . [I]nstead of hedges; they being as if were fet by the hands of men. Yet the belt for the most part is in the high countries somewhat far from the sea tide and great rivers."³

Colonel Edward Stiff analyzed this formation with a broad perspective and visualized the existence of a once great mass of water near the Cross Timbers. In his 1840 publication he stated, "Whether this was once the beach of a mighty lake or sea, we must leave to the geologist to determine."⁴ Others observed the same or very similar

²Marcy, Exploration of the Red River, p. 85.

³E. De Golyer (ed.), The Journey of Three Englishmen across Texas in 1568, by David Ingram, p. 559.

⁴Colonel Edward Stiff, The Texan Emigrant, p. 41.

incidents and made their reports. A few years later William Kennedy was extremely impressed by the natural orientation of this formation and wrote:

The remarkable uniformity which characterizes the Cross Timbers, and its apparently artificial arrangement, under a particular meridian, has induced some persons to believe that it is a work of art, and owes its origin to the unknown race of men who have erected the mounds and ancient fortifications of the Mississippi Valley. It is difficult to conceive, however, for what useful purpose it could have been intended, unless as a landmark to distinguish the boundary between two nations. But whether it be the work of art or of nature, will probably never be determined. The lines of civilisation [sic] are rapidly extending towards it, and soon the scrutiny of science will be forever checked by the destroying axe of the pioneer.⁵

Robert T. Hill, the pioneer Texas geologist, studied the basic question concerning the formation of the Cross Timbers, and worked out a series of theories of its origination which he read before the Washington Philosophical Society in 1887.⁶ In his introduction Hill pointed out:

⁵William Kennedy, Texas: Its Geography, Natural History and Topography, p. 59.

⁶Edward D. Cope and J. S. Kingsley, (ed.), The American Naturalist, XXI, p. 172.

Unfortunately, very few geologists have heretofore visited the country, and hence most of these hypotheses have been based upon compilation or tradition. Most of them imply that the arenaceous soils of the Cross Timbers have resulted from the sediments of post-Cretaceous aqueous channels or basins, which have been preserved intact from destructive denudations.

These theories are partially derived from the relative position of the timbers to the adjacent prairies. One of them is that they represent arms, or inlets, of the Tertiary sea--a theory made plausible by the proximity of their southern termini to the western borders of the Tertiary area.⁷

Hill next brought about the idea which had originally been discussed by Colonel Stiff: "A second theory is that they are the beds of extinct lakes, . . ."⁸ The Texan followed with another reason, "third, that they represent the channels of Quaternary rivers, the direction of which indicate the former general slope of the surface of the country."⁹ Hill then sums up all the opinions by stating:

⁷Robert T. Hill, "The Topography and Geology of the Cross Timbers and Surrounding Regions in North Texas," The American Journal of Science, Third Series, XXXIII, p. 293.

⁸Ibid.

⁹Ibid.

The current opinions concerning their geological age have been as diverse as those concerning their origin Dr. R. H. Loughridge . . . gives the best account of them that I have seen in print, and calls them "stratified Quaternary drift."

With all of these theories in mind, I must confess that I visited the region this summer with a preconceived idea that I should find some one of them approximately true, and I was greatly surprised to find them all equally erroneous.¹⁰

By way of explanation of the falsity of the traditional concepts, Hill continues to describe what one might see with his eye when standing on a piece of elevated ground.

From the top of these buttes and the edge of Grand Prairie, the Cross Timbers look like the waters of a long and narrow lake viewed from an adjacent highland, and in some cases, the opposite shore, as in Comanche country, may be recognized. But the resemblance to a lake is only superficial. It is a case of pseudomorphism,¹¹ if I may be allowed to use that expression, wherein the forces of sub-aerial erosion have imitated those of wind and wave. The essential features of shore topography and

¹⁰Hill, "Topography and Geology of the Cross Timbers," pp. 293-294.

¹¹Pseudomorphism means an irregular or deceptive form.

lacustrine sedimentation are absent. The marks of erosion are plainly evident.¹²

It should be noted that while Hill commented on the erosion, he neglected to continue with this line of reasoning. He expressed his opinion concerning the development of the Cross Timbers:

It is certain that they do not represent lacustrine basins or fluviatile channels, but are simply the detritus of arenaceous strata which occupy well-defined horizons in the geological series, and which have been exposed by the denudation of the overlying strata. The reason why the timber confines itself to these arenaceous belts is also evident. They afford a suitable matrix for the penetration of the roots of the trees, and a constant reservoir for moisture thus furnishing two of the greatest essentials to forest growth. The absence of fertilizing ingredients in the Upper Timbers also accounts for the exceedingly scrubby growth of the timber, which peculiarity, however, the inhabitants always ascribe to the burning of the adjacent prairies. The barrenness of the prairies, so far as forest growth is concerned, is owing to the absence of the requisite structural conditions for preservation of moisture, as well as the excess of carbonate of lime in their soils. The difference in fertility between the sandy loams of the Lower Cross Timbers and the dirty sands of the Upper, accounts for the varietal differences of their respective floras. The flora of the Cross Timbers is by no means confined to those two areas, but exist

¹²Hill, "Topography and Geology of the Cross Timbers," p. 301.

in smaller tracts wherever the soil and structure are favorable. In fact the finest development of flora has been observed in some of these local patches.¹³

In 1892 Hill confirmed his solution by adding: "The cause of this forest growth was the sandy soil and substructure, which was the outcrop of a rock sheet marking the beginning of the Black Prairie Series of rocks."¹⁴ In 1901 Hill continued the development of his idea by stating:

The cause of these peculiar ribbons of upland timber between vast stretches of treeless prairie had long been a subject of inquiry before the writer, in 1887, showed that the forest growth was adapted to the geologic formations, the two belts of Cross Timbers being upon outcrops of certain arenaceous formations at the base of the Upper and Lower Cretaceous series of rocks respectively, the deep permeable regolith and sandy soils of which favored forest growth. These conditions are lacking in the close-textured calcareous soils of the intervening prairie regions.¹⁵

¹³Hill, "Topography and Geology of the Cross Timbers," pp. 302-303.

¹⁴Robert T. Hill, On Occurrence of Artesian and Other Underground Waters in Texas, New Mexico, and Indian Territory . . ., p. 69.

¹⁵R. T. Hill, "Geography and Geology of Black Prairie, Texas," Twenty-First Annual Report, U. S. Geological Survey, Pt. VII, p. 82.

The idea of an inland lake as the original cause of the formation of the Cross Timbers, expressed by Colonel Stiff, was, therefore, resolved by Doctor R. T. Hill as erroneous.

In 1904 William L. Bray, a botanist,¹⁶ did not limit himself to the nature of the soil when he explained the possible cause for the growth of the forest belt. In a detailed manner he stated, "the principal natural influences which have determined the character and extent of forest in Texas are rainfall, nature of the soil and rock, temperature, sunlight, and winds. Of these the first two are by far the most important."¹⁷ In another publication Bray explains that small plants sometime gain a foothold in the more difficult locations to protect and assist the development of larger plants.¹⁸

¹⁶William L. Bray was a Professor of Botany at Syracuse University, New York, who collaborated with the U. S. Forest Service of the Department of Agriculture.

¹⁷William L. Bray, Forest Resources of Texas, U. S. Department of Agriculture, Bureau of Forestry, Bulletin No. 47, p. 11.

¹⁸William L. Bray, The Timber of the Edwards Plateau of Texas, U. S. Department of Agriculture, Bureau of Forestry, Bulletin No. 49, p. 24.

In 1941 Glenn T. Trewartha, a Professor of Geography at the University of Wisconsin, furnished a different approach to the problem of forest germination. Instead of a consideration of the cause for the growth of the Cross Timbers, he accepts the natural formation and considers the negative side. He asked the question: "What prevented the trees from growing on the prairies?" This appears to be a logical approach, in view of the fact that, had the trees grown on the prairie the unusual shape of the Cross Timbers would not have resulted. Trewartha then stated: "Prairie fires and possible buffalo are often mentioned as the non-climatic factors which tend to prevent the establishment of forest in the eastern prairie lands, where rainfall is sufficient to maintain a moist subsoil."¹⁹ This idea varies from Hill's earlier speculation, but at the same time the two are interrelated.

Isaiah Bowman, Professor of Geography at Yale University, in 1911 presented an argument which favored the Hill solution. In different words Bowman stated:

¹⁹Glenn T. Trewartha, "Climate and Settlement of the Subhumid Lands," Yearbook of Agriculture, Climate and Man, 1941, p: 171.

Both belts have been developed upon the outcrops of two sandy formations (Cretaceous). The open sandy soils not only permit thorough aeration, but also favor the rapid absorption of water during periods of rainfall, whereas the close-textured soil of the intervening prairies shed water to an exceptional degree and are too dry for tree growth. The limited rainfall of the district thus makes the porosity of the soil a determining factor in forest distribution.²⁰

However, Bowman did not stop with this point. He continued by adding a notion worthy of consideration. It is common knowledge that during the Ice Age certain glaciation effects entered the United States, and Bowman explains the results of such activity on plant life.

As the ice advanced from the north, northern species were driven southward and more southerly species correspondingly displaced or exterminated. It appears that the gradual southward movement of the cold zone greatly restricted the range of the plants compressing them from north to south within very narrow limits. Perhaps the most interesting evidence of the strength of this hypothesis is the presence of colonies of Arctic species on isolated mountain summits in southerly latitudes where at a high altitude abnormally low temperatures exist similar to those which exist in their northern homes. Such colonies could not in many cases have reached their present position during

²⁰Isaiah Bowman, Forest Physiography, p. 491.

existing climatic conditions; following the retreat of the ice at the close of the glacial period many boreal species were stranded on mountains where their survival was conditioned by their ability to migrate with congenial climate.²¹

Charles L. Baker, Professor of Geology at The University of Texas, declines to accept the Bowman theory, and, in 1916, announced that "no part of the surface relief in Texas is due to the accumulation of glacial deposits which are common in the northern part of the United States. It may also be stated that no part of its present surface is the direct result of superficial volcanic activity."²² Baker explains that the activity which established the surface features of Texas were basically the result of erosion and of ground movement of tectonic forces. He stated, "the orogenic or mountain building forces . . . usually produce radical changes in relief, the boundaries of which are clearly outlined."²³

²¹Bowman, Forest Physiography, p. 494.

²²C. L. Baker, "Physiography," A. J. Udden, C. L. Baker, and Emil Böse, Review of the Geology of Texas, p. 9.

²³Ibid., p. 10.

Oran M. Roberts²⁴ explained that geologists and others have over-emphasized terrain features and stated that there is no real problem confronting the student; Roberts reasoned that,

The rule, so far as it can be made into a set form of words, is that in every prairie, desert or other place devoid of trees, or forests of trees, there is a deficiency or an excess of some one or more (usually several) of these four elements of production, either permanently, or periodically, existing there to an extent sufficient to prevent their generation and growth.²⁵

It appears that the qualifications of the people attempting these different studies have been a material influence upon their reasoning, and insufficient consideration has been devoted to such other fields as meteorology as a factor in the growth of the Cross Timbers. Since we are concerned with this forest and the essential vegetation, it is at this point that we leave the geologists. It may be concluded that the natural external requirements

²⁴Oran M. Roberts was technically not qualified as a geologist, but he demanded consideration and respect for his ideas published in 1881, while serving as the Governor of Texas.

²⁵Oran M. Roberts, A Description of Texas, Its Advantages and Resources, p. 35.

for production and regeneration of the trees existed only at this particular location. The soil content combined with favorable climatic conditions render the situation suitable for the phenomena which was recorded as an item in the journals of history.

B. Climatic Conditions

The climatic conditions would be a consideration of the different weather changes such as wind and rain. As early as 1844, it was recorded that a constant prevailing wind was present; William Kennedy wrote:

It is because Texas is a prairie country, and situated at the bottom of the Gulf of Mexico, a sea breeze always blows across the whole country, rendering it cool, and refreshing it notwithstanding the sun's rays. This breeze is apparently a continuation of the trade winds.²⁶

The western plains region of the United States, previously mentioned as the arid waste lands, commences on the western edge of the Cross Timbers. When an insufficient amount of rainfall occurs in the nation, this

²⁶Kennedy, Texas: Its Geography, Natural History, p. 51.

area is tremendously involved; the arid condition allows the dry sand to be blown by the wind. Hill states that the "sand is utterly untenacious, except when wet, and is readily distributed by the high winds."²⁷ Therefore, it is possible for the dry sands of the desert to fall as sediment in North Central Texas, after colliding with the wet wind of the south. Louis V. Pirsson, a geologist of international fame, explains the activity of the west wind:

In humid regions, where the rainfall promotes the growth of abundant vegetation, the soil is protected, the wind is unable to lift and carry it. . . . In arid countries, as in the south west part of the United States, the walls of rock masses are carved and cut into hollows and caves . . . a single storm, traveling from the arid southwest [carry] a thousand miles into the region about the Great Lakes.²⁸

Moisture is one of the essential needs for all vegetation, but trees require exceptional amounts and become an attraction for water. This action was explained by an early agriculturalist.

²⁷Hill, "Topography and Geology of the Cross Timbers," p. 292.

²⁸Louis V. Pirsson, A Text Book of Geology, p. 13.

The action of the forest in adding to the rain fall appears to be due to their offering as obstruction to the free flow of currents loaded with vapor, and the upward tendency such obstructions give to the air, by which it is piled up and retarded until accumulated at sufficiently high elevations to induce condensations into clouds and rain.²⁹

The fact that the trees form an obstacle and set up a wind degradation effect to assist the condition that encourages plant growth has been confirmed by a recent cultivator of the soil.

The retardation of the wind starts a whole chain of favorable climatic influences such as reduction of evaporation, lowering of temperature, increasing relative humidity of the air, and accumulation of moisture.³⁰

It is evident that the moist southern wind has a material effect upon the growth and reproduction of a forest in North Central Texas. It was with this in mind that E. H. Sellards, B. C. Tharp, and R. T. Hill, a group of Texas scholars, called attention to the fact that,

²⁹James S. Lippincott, "Observations on Atmospheric Humidity," Report of the Commissioner of Agriculture for the Year, 1865, p. 540.

³⁰Raphael Zon, "Climate and the Nation's Forests," Yearbook of Agriculture, Climate and Man, 1941, p. 482.

Aridity, both of soil and of atmosphere coupled with the comparatively high and constant winds constitute the main factors in the extreme conditions which preclude the growth of timber. Exceptions to the general rule are to be found in moist draws, along creek channels, and along most of the river courses in situations where soil moisture, at least is abundant. . . . Since the climax for the region is mixed prairie, it follows that trees must be relatively transitory and unimportant members of the earlier stages of succession.³¹

The average rainfall required to sustain a forest has been estimated at approximately thirty inches per year. When a map is used to plot all points of this amount of rainfall, a line connecting the positions will form a dividing line between the Eastern and Western Cross Timbers. The presence of water is not always visible in the form of rainfall. Sometimes an adequate supply is contained as moisture in the soil, and ". . . it is not primarily the amount of moisture which falls to the ground, but the amount of moisture which the soil holds that affects them."³²

The rate of transpiration is a direct effect on the growth of vegetation which is indicated by the atmospheric

³¹E. H. Sellards, B. C. Tharp, and R. T. Hill, "Investigation on the Red River Made in Connection with the Oklahoma-Texas Boundary Suit," p. 124.

³²Bray, Forest Resources of Texas, p. 12.

conditions. If the status of the air is hot, dry, or windy, then transpiration becomes greater; and less with the opposite conditions when the air is cool, moist, and calm. The wind speed increases rapidly as elevations are increased above the ground; hence, trees are subject to ever increasing transpiration as they grow.³³

As one travels up the Red River (westward), the size of the trees diminishes at a point just below the junction of the one hundredth meridian and the river. The type of soil and atmosphere combined with a persistent wind prohibit growth of timber in certain parts of the southwest. Influenced by endless decades of variables the Cross Timbers adhered to the conditions which existed in this one location. George W. Kendall passed through the forest in 1841 and published his impression: "The belt. . . for whatever purpose it may have been fashioned by the Great Creator of all things, appears to be an immense natural hedge dividing the woodlands of the settled portions of the United States from the open

³³G. L. Hayes and Jesse H. Buell, "Trees also Need Water at the Right Time and Place," The Yearbook of Agriculture, 1955, Water, p. 220.

prairies which have been the home and hunting-grounds of the red man."³⁴

C. The Effect of Salt

Today salt is one of the condiments expected on every dinner table, however, a century ago salt was an essential ingredient for all animals. This mineral, in addition to water, was required in large quantities for animals to survive in the hot dry climate of West Texas. Padre Fray Juan Agustin de Mofi, a Spanish Franciscan in Texas, recorded in his 1779 diary a comment concerning salt near the Cross Timbers; Morfi wrote: "The water of the river, which is slightly salty is also a powerful attraction for cattle which in large herds feed on its banks. The Indians kill large numbers of them annually."³⁵

In 1804 William Dunbar and Doctor Hunter explored the area of East Texas near the Cross Timbers and recorded a description of their trip. It was noted that

³⁴George W. Kendall, Narrative of Texan, Santa Fe Expedition, pp. 110-111.

³⁵Frederick C. Chabot, (Trans.), Excerpts from the Memories for the History of the Province of Texas, by Padre Fray Juan Agustin de Morfi, p. 9.

a great amount of salt was observed and used by the animals. The term "salt licks" or just plain "licks" was frequently used to describe these locations. In their journal they reported that the "French hunters have bestowed upon most of the licks frequented by the beast of the forest."³⁶

The industrious American took steps to eliminate the abundant supply of natural salt. In 1805 John Sibley, a native of Louisiana, and Francis Grappe, his assistant and interpreter of Indian languages, arrived at a salt works in East Texas where the tremendous quantity of salt enabled two men, both cripples, to provide enough salt for the entire district.³⁷ The demand for salt was very great as it was used to preserve fresh meat.³⁸ Captain

³⁶William Dunbar and Doctor Hunter, "A Description of the Country," American State Papers, 9th Cong., 1 Sess. No. 113, p. 737.

³⁷John Sibley to General Henry Dearborn, the U. S. Secretary of War, April 10, 1805, American State Papers, 9th Cong., 1 Sess., No. 113, p. 725. (Sibley, at the encouragement of President Thomas Jefferson and the support of Congress, made some investigations of the Indians and of the geography in the Red River area).

³⁸J. De Cordova, Texas: Her Resources and Her Public Men, p. 30. (Large amounts of salt were used in the preparation of raw meats for preservation to last through the warm season).

Burnet purchased some of this rich land and planned to supply the entire Mississippi Territory with salt.³⁹ The vast volume of salt was so great that by 1840 it was still in existence.⁴⁰ By 1852, however, Captain R. B. Marcy apparently had some difficulty in locating salt and declared that he did not think salt was available in the area near the Cross Timbers.⁴¹

D. Plant Life

Oak has been reported as the principal type tree contained within the Cross Timbers, and more especially "blackjack oak" and "post oak." The repetition of this fact has been consistent down through recorded history. In 1804 William Dunbar explained that the area produced

³⁹Sibley to Dearborn, April 10, 1805, American State Papers, 9th Cong., 1st Sess., No. 113, p. 727.

⁴⁰Colonel Edward Stiff, Texan Emigrant, p. 124.

⁴¹Captain Randolph B. Marcy made six different trips through the Cross Timbers between 1849 and 1852.

Marcy, Exploration of the Red River, Senate Executive Document 54, 32d Cong., 2d Sess., p. 91. (In the footnote Marcy adds, "I have understood since our return that Indians have recently discovered a deposit of salt (Chloride of Sodium) about three miles to the south of our return route, near the western extremity of the Wichita Mountains.").

red, white, and black oak, and "timber is seen projecting from under the solid rocks, which seems indurate, and unquestionably very ancient."⁴² A year later John Sibley stated that the growth was principally oaks.⁴³ From an early newspaper published in 1841, we learn "The trees composing it are chiefly post oak"⁴⁴ In 1844 William Kennedy stated, "Post oak and jack oak useful for fencing and fuel."⁴⁵

Captain Randolph B. Marcy recorded his observations in three different official documents. He wrote, "The Cross Timbers being a growth of blackjack and post oak, both dwarfish and not unfrequently unsound at the core."⁴⁶ In the same document he wrote, "Through the 'Cross Timbers' the wood is blackjack, post oak, over-cup, and Hackberry."⁴⁷

⁴²William Dunbar and Dr. Hunter, Extracts from Journals by, American State Papers, vol. IV, No. 113, 9th Cong., 1st Sess., p. 732.

⁴³Ibid., p. 729.

⁴⁴Telegraph and Texas Register, January 6, 1841, p. 2, col. 3 and 4.

⁴⁵Kennedy, Texas: Its Geography, p. 57.

⁴⁶Letter from Secretary of War, House of Representatives, Ex. Doc. 45, 31st Cong., 1st Sess., p. 7.

⁴⁷Ibid., p. 36.

In another paper published later in the same year, he repeated himself with, "Through the 'Cross Timbers' the wood is blackjack, post oak, over-cup, and hackberry."⁴⁸ Two years later Marcy wrote, "The trees, consisting principally of post oak and blackjack, standing at such intervals that wagons can without difficulty pass between them in any direction."⁴⁹ When Lt. William H. C. Whiting described Fort Graham, he stated, "Timber of cedar and oak bounds in the vicinity."⁵⁰

The types of trees in the Cross Timbers was recorded in both the introductory statement made by Brevet Captain John Pope and in his journal; he recorded: "The principal growth of these two belts of timber are the post oak, blackjack, ash, hackberry, pecan & c."⁵¹ Then on Monday, May 8, 1854, he wrote, "post-oak, in abundance, with hackberry, elm, scrub oak, etc."⁵²

⁴⁸Reports of the Secretary of War, Senate Ex. Doc. 64, 31st Cong., 1st Sess., p. 177.

⁴⁹Marcy, Exploration of the Red River, p. 85.

⁵⁰Report of Secretary of War, Senate Ex. Doc. 64, 31st Cong., 1st Sess., p. 241.

⁵¹Report of Explorations and Surveys, II, Senate Ex. Doc. 78, 33d Cong., 2d Sess., p. 26.

⁵²Ibid., p. 90.

In 1853, Lieutenant A. W. Whipple explored along the thirty-fifth parallel for a railroad route, and reported, ". . . a belt of the Cross Timbers whose trees of live oak, post oak, and blackjack, were too thick to penetrate."⁵³ E. F. Beale reported in his journal on November 22, 1858, ". . . encamped on the northern and western verge of the Cross Timbers, and find the blackjack decidedly the best firewood I ever used. It seems inexhaustible in quantity."⁵⁴ Ten years later I. R. Warrall, a settler, wrote, "timber is mostly post oak,"⁵⁵ and "This timber is, on the uplands, almost exclusively post oak and blackjack, and is short and scrubby."⁵⁶

The tenth census of the United States, taken in 1880, included two items which were related to this area. Loughridge wrote, "The belt is thickly timbered with a growth of post and blackjack oaks, and has a deep sandy

⁵³Report of Explorations and Surveys, vol. III, Senate Ex. Doc. 78, 33rd Cong. 2nd Sess., p. 23.

⁵⁴Wagon Road-Fort Smith to Colorado River, House of Rep. Ex. Doc. No. 42, 36th Cong., 1st Sess., p. 15.

⁵⁵I. R. Warrall, "Northern Texas," Texas Almanac, 1868, p. 146.

⁵⁶Ibid., p. 150.

soil."⁵⁷ [See enclosure 23 (Map)]. Sargent wrote, "A belt of forest, largely composed of post and blackjack oaks, varying from 20 to 50 miles in width extends south-east."⁵⁸ [See enclosure 25 (Map)].

Robert Thomas Hill, the venerable geologist, wrote: "Lower or Eastern Cross Timbers. This forest is largely composed of blackjack and post oak trees, which grow in deep, sandy soil"⁵⁹ Then about the western timber belt he wrote, ". . . the Western Cross Timbers. Like the Eastern Cross Timbers, these consist of an upland forest growth of post oak and blackjack growing on sandy soils."⁶⁰

Walter Prescott Webb and H. Bailey Carrol, two outstanding historians of The University of Texas, describe the Texas Cross Timbers as follows: "The Eastern (or Lower) Cross Timbers, a narrow band of blackjack and

⁵⁷R. H. Loughridge, Report on Cotton Production of State of Texas, Misc. Doc. 42, part 5, House of Rep., 47th Cong., 2d Sess., p. 29.

⁵⁸Charles S. Sargent, Report on the Forest of North America (Exclusive of Mexico), Misc. Doc. 42, part 9, House of Rep., 47th Cong., 2d Sess., p. 540.

⁵⁹R. T. Hill, "Geography and Geology of the Black and Grand Prairies, Texas." Annual Report of Department of Interior, Document 5, House of Representatives, 56th Cong., 2d Sess., p. 69.

⁶⁰Ibid., p. 81

post oak, separate the region of Black Prairies on the east from the Grand Prairies on the west."⁶¹ Concerning the Western (or Upper) Cross Timbers Webb and Carroll point out: "The natural vegetation is a woodland predominantly made up of dwarfed post oaks."⁶² The current copy of the Texas Almanac, published by the Dallas Morning News, contains the following brief description: "East Cross Timbers. . . . Its principal timbers are post oak and others similar to those of West Cross Timbers."⁶³ And "West Cross Timbers. . . . Trees are primarily post oak and blackjack, though there are pecans, elm and other trees along streams and a considerable growth of mesquite especially in the southern part."⁶⁴

A student of history who is not familiar with the botany of Texas might ask: what does the post oak, blackjack oak, and other trees resemble? Information from the best and most current reference has been extracted and

⁶¹Walter P. Webb and H. Bailey Carroll, (eds.), Hand Book of Texas, I, p. 537.

⁶²Ibid., II, p. 885.

⁶³Texas Almanac, 1961-1962, p. 108.

⁶⁴Ibid.

included on subsequent pages.⁶⁵ This data indicates that, in earlier days, there would be ample supply of acorns available for wild game and buffalo to feed upon.

The term "Post Oak" raises a question concerning the use of this timber for the construction of fences during the barbed wire episode. To be sure, some energetic farmers and ranchers made use of the available supply.⁶⁶ It was soon learned that a grave mistake had been committed. An efficient fence crew could never completely enclose a large area of several sections of land. In the process of building the fence it was learned that the posts initially installed with post oak timber were rotten.⁶⁷ With the typical backwoods ingenuity different types of

⁶⁵Robert A. Vines, Trees, Shrub and Woody Vines of the Southwest, Post Oak, p. 154, listed herein on page 35; Blackjack Oak, pp. 182-183, listed herein on page 36; Common Hackberry, pp. 205-206, listed herein on page 37; Overcup Oak, p. 147, listed herein on page 38.

⁶⁶Rev. Chester Newell, History of the Revolution in Texas, (Together with the latest Geographical, Topographical and Statistical Accounts of the Country), p. 175.

⁶⁷F. C. Craighead, (ed.), and others, The Yearbook of Agriculture, 1949, Trees, (Post oak will last about five years and cedar post will last from fifteen to thirty years. Another excellent fence post used in the southwest is the Osage-Orange or Bois d'arc).

Post Oak
Quercus stellata Wanh

Field Identification: Called a shrub or tree that reaches a height of seventy-five feet, with stout limbs and a dense rounded head.

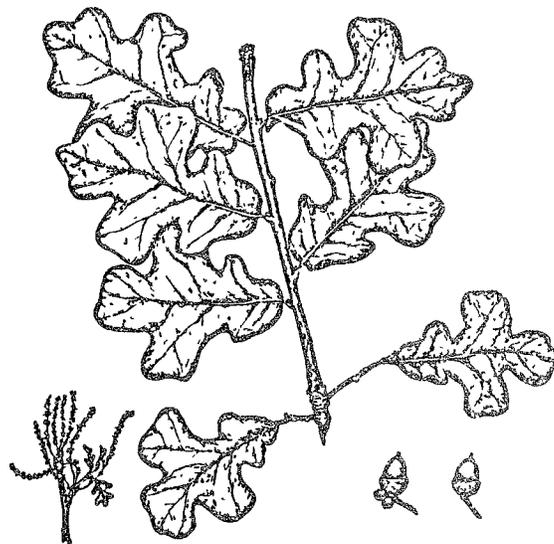
Fruit: Ripening between September and November, the acorns mature the first season. They are set in a cup one third to one half its length.

Leaves: Illustrated below, the leaves are simple, five lobed oblong blades about four to seven inches long and three to four inches wide.

Wood: The finished lumber is light to dark brown, durable, heavy, hard, close-grained, difficult to cure, weighing about fifty-two pounds per cubic foot.

Range: The Post Oak is distributed in the Edwards Plateau of Texas.

Remarks: Vernacular names are Iron Oak, Cross Oak, Branch Oak, Rough Oak and Box Oak. The wood is used for railroad crossties, fuel, fence post, furniture, and lumber. The acorns are eaten by deer and wild turkey.



POST OAK
Quercus stellata Wanh.

Blackjack Oak
Quercus marilandica Muenchh

Field Identification: From shrub or to round-topped symmetrical tree that attains a height of sixty feet and diameter of the trunk of two feet.

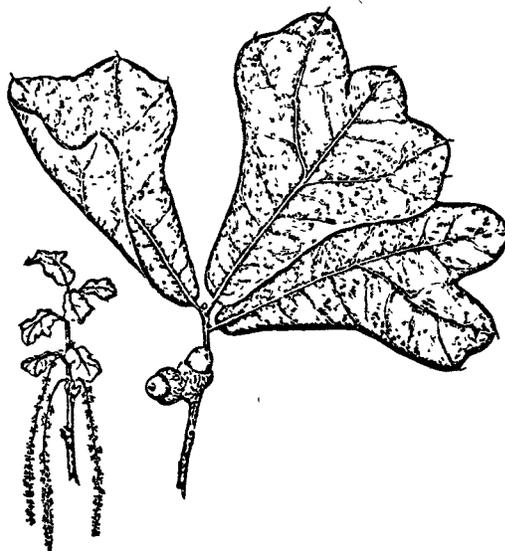
Fruit: The acorn ripens in two years and grows as a solitary or in pairs. In a thick cup the acorn is rounded and suddenly constricted by a thin layer.

Leaves: Illustrated below, the leaves are simple, three lobed, stiff and with a broad shape. The length is three to seven inches and width two to five inches.

Wood: The finished wood is dark brown, heavy, hard, strong, weighing forty-six pounds per cubic foot.

Range: Usually grows on dry, sandy, sterile soils such as in Central Texas.

Remarks: Also known by the vernacular names of Iron Oak, Black Oak, Jack Oak, Barren Oak, and Scrub Oak. The wood is used mostly for posts, fuel, and charcoal. The acorns are sought by wild turkey and white-tailed deer.



BLACKJACK OAK
Quercus marilandica Muenchh.

Common Hackberry
Celtis occidentalis L.

Field Identification: The tree attains a height of 120 feet and has a rounded crown. The gray bark bears corky warts and ridges.

Fruit: The drupe is variable in sizes and color from an orange-red to dark purple.

Leaves: Illustrated below, the leaves are simple, single lobe ovate. The blades are two to four inches long and one to two inches wide.

Wood: The finished wood is yellowish white, coarse-grained, heavy soft, weak and weighing forty-five pounds per cubic foot.

Range: Texas

Remarks: Vernacular names are Nettle-tree, False-elm, Bastard-elm, Beaverwood, Juniper-tree, Rim-ash, Hoop-ash, and One-berry. The tree is drought resistant and often planted for shade and for shelter-belt planting. The wood is occasionally used commercially for fuel, furniture veneer, and agricultural implements. The fruit is known to be eaten by twenty-five species of birds and by the Indians.



COMMON HACKBERRY
Celtis occidentalis L.

Overcup Oak
Quercus lyrata Walt

Field Identification: This tree attains a height of 100 feet and has a diameter of two or three feet. The branches are small, crooked and often drooping, forming an open, irregular head.

Fruit: The acorn is produced annually and grows either singularly or in pairs. The seed is nearly completely enclosed by the cup.

Leaves: Illustrated below, the leaves are oblong blades about three to ten inches long and one to four inches wide.

Wood: The finished lumber is dark brown, durable hard, strong, tough, close-grained and weighing about fifty-one pounds per cubic foot.

Range: On wet, poorly drained clay soils.

Remarks: Other vernacular names are Water White Oak, Swamp White Oak, Swamp Post Oak, and White Oak. The young plants are browsed by deer and cattle.



OVERCUP OAK
Quercus lyrata Walt.

trees were tested as fence posts. The results were reported in terms of hauling distance.

Experienced farmers say it is cheaper to wagon pine plank one hundred miles and Bois d'arc post fifteen miles than to make a fence of the best oak rails, hauling them five miles; as the former will last good for twenty years, and furnish much good material for a new fence, while the latter is gone in five or six years.⁶⁸

The oak timber has been effectively used for several different requirements, but the most common has been as fuel for both the resident and the railroad. When the influences of civilization upon the Cross Timbers was obvious, action was taken to attempt reductions in these effects. Laws were passed to prevent the burning of prairies and unnecessary cutting of timber.⁶⁹

E. Animal Life

The remains of prehistoric animal life have been discovered in the area of the Cross Timbers. Shells of

⁶⁸I. R. Worrall, "Northern Texas," Texas Almanac, 1868, p. 153.

⁶⁹J. De Cordova, Texas: Her Resources and Her Public Men, pp. 35-36.

oysters and other bivalves have been preserved as fossils. At one time these relics were so prevalent that they were used as an item in the construction of roads. In addition, early animals of this region provided a source for geological names such as the dinosaur sands,⁷⁰ a layer of soil within the Cross Timbers. Other available information leads one to believe that large animals such as dinosaurs could have dwelled within this general area. All the basic essentials are present to support the existence of animal life for countless years.

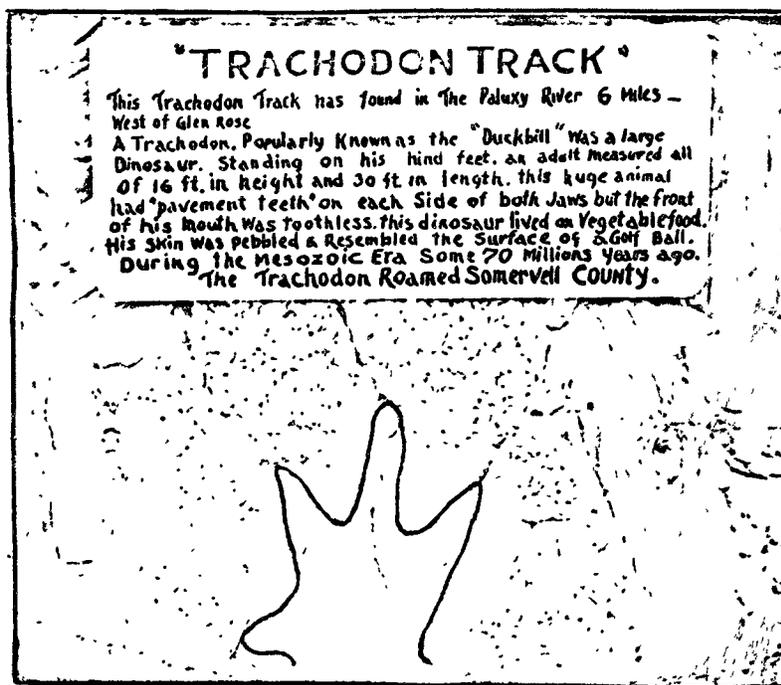
The food and water that were available in this natural surrounding encouraged wild game to accumulate in great abundance. They lingered in or near this timbered jungle. The Indian had little difficulty sustaining himself by using the primitive weapons such as clubs, spears, and even the bow and arrow. Game would approach close enough for the fatal blow without the stalking procedure used in the open country.

⁷⁰Robert T. Hill, "Topography and Geology of the Cross Timbers and Surrounding Regions in Northern Texas," The American Journal of Science, Third Series, XXXIII, p. 296.

The city of Glen Rose,⁷¹ in Somervell County, has mounted a petrified stone in their town square which contains the imprint of what resembles a so-called Trachodon, or Dinosaur Track. This stone was found in the Paluxy River about six miles west of the town, Glen Rose -- the Paluxy traverses the Western Cross Timbers.⁷²

⁷¹Glen Rose is the county seat of Somervell County, and in 1960 reported a population of 1,422.

⁷²A photograph of this rare track was made and included below as an illustration.



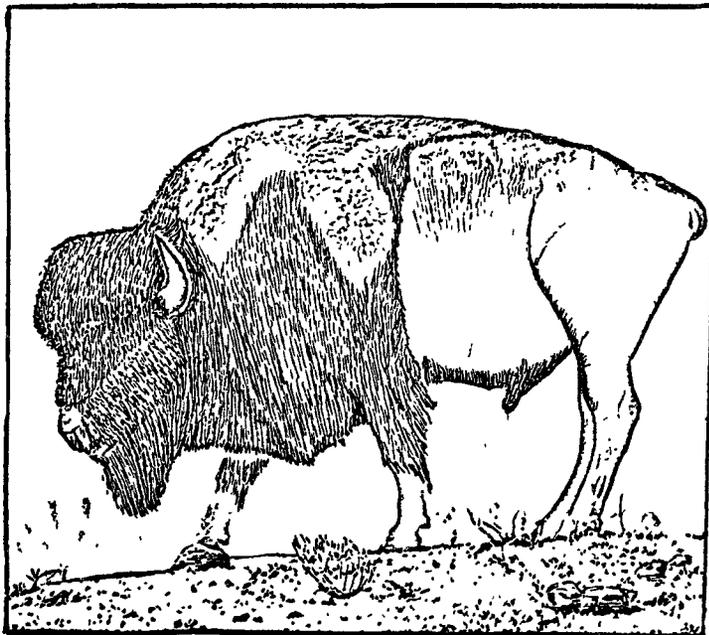
C H A P T E R I I I

THE AMERICAN BISON

A. Introduction

The American Bison, commonly called a buffalo,¹ was not the only undomesticated beast that roamed the central portion of North and Central America, but his existence can be directly related to the Cross Timbers. The Spanish

¹Martin S. Garretson, The American Bison, p. 9. ("[A]ccording to scientist is not a buffalo at all. They tell us the word 'buffalo' should be reserved for the water buffalo.").



mustang on the other hand moved freely over the Great Plains and was even hunted near the same grounds as the buffalo. It is significant that most of the evidence of these wild horses was in the area west and south of the Cross Timbers and was never associated with the forest. At the same time, the longhorn cattle took possession of the coastal plains and the flat terrain south of San Antonio. The Texas Longhorn became acquainted with the Cross Timbers only when he was driven in herds during the great cattle movements. At the same time, the buffalo was closely related to the borderlands of the Cross Timbers.

As time passed, the buffalo was called by several different names. The Spanish identified them as "bulls," "wild cows" and "oxen." The French recorded knowledge of them as "boeufs" (pronounced "buffs"). The English used the term "buffle" and "buffelo"; Mark Catesby, the historian, modified the "buffelo" to the modern term "buffalo."² In 1533 the Spanish explorer, Alvar Nunez Cabeza de Vaca³ referred to the buffalo as "Indian Cattle" and as "Cows."

²Mark Catesby, Natural History of Carolina, 1754, I, as stated in Garretson, American Bison, p. 10.

³Meaning the skull of a cow.

The first written report of the buffalo in his natural environment was made in the journals of Cabeza de Vaca.

He wrote,

All over this country [Texas] there are a great many deer, fowl and other animals which I have before enumerated. Here also they come up with cows; I have seen them thrice and have eaten their meat. They appear to me of the size of those in Spain. Their horns are small, like those of the Moorish cattle; the hair is very long, like fine wool and like a peajacket; some are brownish and others black, and to my taste they have better and more meat than those from here. Of the small hides the Indians make blankets to cover themselves with, and of the taller ones they make shoes and targets. These cows come from the north, across the country further on, to the coast of Florida, and are found all over the land for over four hundred leagues. On this whole stretch, through the valleys by which they come, people who live there descend to subsist upon their flesh. And a great quantity of hides are met with inland.⁴

The buffalo did not fear the forests areas as did the longhorn or the mustang. In fact, certain species of this animal were considered as wood bison. This animal possessed a slightly different appearance from the more common plains bovine. For example, a robe made from the hide was much thicker and darker; also, the wood bison was heavier when fully grown.⁵ It was a natural instinct

⁴Garretson, American Bison, pp. 11-12; also Walter Prescott Webb, Great Plains, p. 98.

⁵Garretson, American Bison, p. 6.

for the buffalo to rub his hairy body against trees and rocks to remove the winter growth, as Wayne Gard has written: "One animal after another would rub his shaggy sides against the tree until it was completely barked and killed."⁶ When trees were not available, as in the great plains, the bulls would paw and gouge out an area eight to twelve feet across and about two feet deep. This hole was called by hunters as a "buffalo wallow" and was the favorite resort of the animals during the shedding season.⁶ There was no evidence of these "buffalo wallows" near the forest or in the Cross Timbers which indicated that the buffalo preferred to rub against a vertical object. When the first telegraph line was installed across the great plains, the suffering beast found a man-made answer to his constant itch. The heavy weight and pressure of the buffalo forced many of the poles down and broke the lines. The company attempted to stop the damage to their poles by installing spikes a few feet off the ground. The buffalo became angered and fought among themselves for a chance to scratch against these new spikes.⁷

⁶Wayne Gard, The Great Buffalo Hunt, p. 17.

⁷Garretson, American Bison, p. 36.

The trees of the Cross Timbers were a natural paradise to meet the buffalo's instinctive requirements.

B. Buffalo Habits

Many strange habits of the buffalo herds were learned by the professional hunter. The males were always located on the outer edges as a form of protection with the older bulls trailing the rear or left behind.⁸ The cows and calves collected near the center taking advantage of this massive formation for their defence.⁹

The stupidity of the buffalo was amazing. Once the immense herd was stampeded nothing could stop them. Normally the herd moved at a slow, constant pace, with each animal eating the tufts of grass as he moved along. Yet, a sudden alarm could change this leisure progress into a terrifying and deadly stampede. In their blind speed, many would be pushed into deep treacherous streams or jump to their death over a steep cliff. With a constant pushing from the rear, the leading animals would be unable

⁸Gard, Great Buffalo Hunt, p. 14.

⁹Homer W. Wheeler, Buffalo Days, p. 81.

to step aside. In 1541 some of the men in Coronado's party observed a stampede of buffalos fill a deep ravine, so that the animals rushing from behind crossed on the trampled bodies of those that had been in front.¹⁰ These stampedes have been known to attack strange objects. It was only by shooting the leaders of the rushing herd that Major Richard Irving Dodge was able to cause the herd to split and pass around his position.¹¹

Colonel Dodge was stationed on the Arkansas River from 1869 to 1873 and was able to study the migratory movements.

Early in the spring, as soon as the dry and apparently desert prairie had begun to change its coat of dingy brown to one of palest green, the horizon would begin to be dotted with buffalo, single, or in groups of two and three, forerunners of the coming herd. Thicker and thicker, and in larger groups they come, until by the time the grass is well up, the whole vast landscape appears a mass of buffalo, some individuals feeding, others lying down, but the herd moving slowly, moving constantly to the northward. . . . Some years, as in 1871, the buffalo appeared to move northward in one immense column, often times from twenty to fifty miles in width, and of unknown depth from front

¹⁰Gard, Great Buffalo Hunt, p. 10; E. Douglas Branch, The Hunting of the Buffalo, p. 17.

¹¹Gard, Great Buffalo Hunt, p. 12, and Branch, Hunting the Buffalo, p. 149.

to rear. Other years the northward journey was made in several parallel columns, moving at the same rate and with their numerous flankers covering a width of a hundred or more miles.¹²

The unusual habits of the buffalo have been the subject of observation from the earliest times. When one animal started for water the others followed. After drinking and resting for a short spell near the source of water, they would move back in single file to their feeding grounds. This simple habit resulted in the development of a system of trails between the two necessities. It was from this evidence that hunter learned to pick out the leaders for his first shot and by observing trails to locate water for his own thirst. These buffalo trails were used over and over again. The narrow path, of about a foot wide, was gradually cut deeper and deeper straight down into the soil to a depth of six or seven inches without a noticeable change in the width.¹³ Covered wagons moving west frequently met these deep ruts, many of them nearly a foot into the soil. Their natural

¹²Branch, Hunting of Buffalo, p. 5.

¹³Garretson, American Bison, p. 57.

construction opposed the westward human migration and frequently became a hazard. Hidden trails could cause horses to trip and break their legs. They could also bounce wagons and damage wheels and axles. These accidents were so common that the best trained wagon masters required each family to carry extra wagon parts.¹⁴

The buffalo was considered as the best natural engineer that the world has ever known. He invariably selected the best route which was always the line of least resistance. This made his trail the best grade that was possible to locate in the direction of the country traversed. Evidence of this fact was noted when it was learned that the trails could be converted to a practical use by the railroads. The initial surveyors seeking a way for the railroads across the plains followed the same old buffalo trails for many miles without being able to make improvements on the grade. Martin Garretson reports:

The Baltimore & Ohio Railroads followed the buffalo trail across the mountains to the Ohio River, and the Union Pacific up the valley of the Platte follows buffalo trails

¹⁴Branch, Hunting of Buffalo, p. 120.

practically all the way from Omaha into the Rocky Mountains.¹⁵

As a result, when a traveler to the west lost his bearings and was without a compass, a search was made for the local buffalo trails. Generally these trails were landmarks and ran almost due north and south. Once the trail was located a quick orientation would place the party back on course.¹⁶

C. Destruction of the Buffalo Herd

Writers have observed that during the rutting season every buffalo in the herd became sleek and vigorous from grazing on the nutritious grama grass. It was during this time that the smaller herds moved in and combined with others to form in one great, dense mass. The males fought to dominate and select their mates, pushing the older bulls further out of the herd.¹⁷ When these herds consolidated the aggregate number was frequently beyond

¹⁵Garretson, American Bison, p. 57.

¹⁶Branch, Hunting of Buffalo, p. 121.

¹⁷Ibid., p. 7.

the power of the human mind to even estimate. In 1832 Captain Bonneville recorded in his journal, "As far as his eye could reach, the country seemed absolutely blackened by innumerable herds."¹⁸

In 1859, Luke Voorhees, the ex-territorial treasurer of Wyoming, visited the buffalo country and stated, "to estimate or comprehend the number of animals would have been entirely futile."¹⁹ Voorhees had traveled over two hundred miles with buffalo on all sides as far as the eye could see. To exclaim that there were a million beasts would not have adequately expressed this sight.²⁰

The buffalo left his sign on the banks of streams. At every bend in the Red River to the west, where the plains ran down to the water, the banks were grooved and completely worn down by the buffalo. A spot was marked as their crossing place, with the distinctive buffalo ruts, some of them a foot deep, converging at the smooth, hard banks.²¹

¹⁸Garretson, American Bison, p. 59; and Gard, Great Buffalo Hunt, p. 5.

¹⁹Gard, Great Buffalo Hunt, p. 61.

²⁰Ibid.

²¹Branch, Hunting of Buffalo, p. 68.

On April 10, 1805, John Sibley gave an account of the buffalo migration in a report to General Henry Dearborn, the Secretary of War; Sibley wrote from Natchitoches, Louisiana:

The accounts given by Mr. Brevel, Mr. Grappe, and all other hunters, with whom I have conversed, of the immense droves of animals that, at the beginning of winter, descend from the mountains down southwardly, into the timbered country, is almost incredible. They say the buffalo and bear particularly, are in droves of many thousands together, that blacken the whole surface of the earth, and continue passing, without intermission, for weeks together, so that the whole surface of the country is, for many miles in breadth, trodden like a large road.²²

In 1872, an estimate made of the number of buffalo that passed between Fort Dodge, Kansas, and Fort Supply in the Indian Territory was based upon the information that the width of the herd exceeded one hundred miles and that the length was unknown. As a contrary opinion, General Phillip Sheridan would not agree to the fabulous estimate of over two billion buffalos. Therefore, the number was reduced to a practical estimate.²³

²²Sibley to Dearborn, April 10, 1805, American State Papers, No. 113, 9th Cong., 1st Sess., "Lewis and Clark's Expedition," p. 730.

²³Garretson, American Bison, p. 64.

The massive size of these herds did not always work to the advantage of the buffalo. The range was over-grazed and little was left on the ground for man or beast. In such large groups it was easy for the young buffalo calves to stray from their mothers. When out of contact with the herd, the calf would be helpless and often followed a hunter's horse back to camp.²⁴

When feeding and migrating, the rear part of the herd continually crowded those ahead, and pushed forward, snatching the tufts of grass as they passed. When their hunger was satisfied, they would fall back, and the rear would move forward in turn. The country over which these large herds passed was left completely bare, except for the countless "chips."²⁵

Excellent riding horses that invaded the buffalo country with their masters found the anticipated grass supply completely exhausted. When forced to chase after the wild buffalo, the domestic horse had two problems. First he was forced to face survival during the initial

²⁴Garretson, American Bison, p. 40 and p. 61

²⁵Joseph H. Batty, How to Hunt and Trap, p. 64; and Branch, Hunting of Buffalo, p. 119.

hunt by an inexperienced marksman.²⁶ Next he faced possible starvation from the lack of grass.²⁷

D. The Indian Hunters

The American Indian and buffalo were linked together on the western plains during their era as closely as the engraving on the five cent piece of modern times. Some of the early Indians were soon to learn of the stampede habit of the temperamental buffalo. They used this instinct to drive herds over high cliffs in massacres which they considered successful hunts.²⁸ However, buffalos on the plains were not situated near cliffs, therefore, this method of hunting required revision.

Freak strikes of lightning or sparks from flint rock could easily ignite the dry grass and a prairie fire would spread rapidly, being guided by the high winds. Buffalo

²⁶General George A. Custer shot his own horse when he participated in his first buffalo hunt. "The unfortunate part of this incident was that the thoroughbred horse, 'Custis Lee,' belonged to Mrs. Custer and was her favorite saddle horse." Garretson, American Bison, p. 104.

²⁷Branch, Hunting of Buffalo, p. 116.

²⁸For examples, see ibid., p. 37; and Garretson, American Bison, pp. 181-182.

became completely confused under these circumstances. When the flames swept up and over the herd, they were left in a very pitiful condition. Their hair was singed, their skin burnt, eyes were swollen, and closed tightly, and thirst drove them mad. They were totally helpless. Large buffaloes would tumble down hills, fall into creeks and die in lingering agony.²⁹

The prairie fire became a new method by which the Indian could defeat the beast and provide food for the winter. The deliberate destruction of the prairie grass was always accompanied by an elaborate ceremony in which the entire village participated and the buffalo would be completely enclosed. "A prairie fire was not a thick blaze, but only a thin line flame. Buffaloes raced along the line, not daring the one jump that would have cleared them of the flames and given them a chance of escape."³⁰ The buffaloes' instinct to observe the geometric lines was not to be ignored and he refused to break the line even if it resulted in in his own destruction.

²⁹Garretson, American Bison, p. 71.

³⁰Branch, Hunting Buffalo, p. 40.

The use of the horse or Spanish mustang made the buffalo hunting much easier for the Indian and the requirement of burning the prairie was abandoned.³¹ The Indian practiced his pony to perfect the skill of horsemanship. In this respect they became a team.³² The mustang was trained to race closely beside the buffalo keeping in pace to allow a stable target for his red-skinned rider. This method was so perfected that even after guns were made available, some Indians continued to use their bows and arrows for the close-in attack.³³

The Indian became aware of the fact that the buffalo would not last forever as a source of meat supply. Lieutenant Wheelock recorded a journal of Colonel Dodge's expedition in the summer of 1834 in which he wrote the discussion between two tribesmen.

Monpisha, an Osage youth, spoke to the Toyash men. . . . My father told me he was once a wild Indian; that white men taught him to be happy, instructed him how to build houses, raise cattle, and live like white men.

³¹Branch, Hunting Buffalo, p. 41.

³²Batty, How to Hunt and Trap, p. 71; and Branch, Hunting Buffalo, p. 22.

³³Gard, Great Buffalo Hunt, p. 28.

I was sent to the white man's school, (missionary school) was taught to read and write. This will be extended to you if you make peace with white men. Your buffalo will be gone in a few years. Your great father, the President, will give you cattle, and teach you how to live without buffalo.³⁴

Later Colonel Dodge confirmed the idea by stating, "The buffalo are becoming scarce; there are less and less every year."³⁵

The displacement and removal of the buffalo was the initial phase in the progressive movement of the frontier line to the west. As the bison was exterminated the Indian menace was eliminated.

In 1875, the Texas Legislature was in session at Austin. A bill was proposed to establish protection of the buffalo. General Philip Sheridan, Commander of the Southwest Military Department, received word about the nature of the Texas bill and appeared before a joint assembly of the House and Senate. Sheridan claimed it would

³⁴Lt. T. B. Wheelock, "Journal of Colonel Dodge's Expedition," August 26, 1834. American State Papers, V, Military Affairs, No. 585, 23d Cong., 2d Sess, "Annual Report of Secretary of War, Showing the Condition of that Department in 1834," p. 379.

³⁵Ibid., p. 380.

be a sentimental mistake to pass any law which would preserve the buffalo. Instead of stopping the hunters he believed that Congress should present each of them with a medal having the representation of a dead buffalo on the one side and a discouraged Indian on the other. Hunters have done more to settle the Indian question than the entire army has done in thirty years. "Let him kill, skin and sell until the buffalo is exterminated, as it is the only way to bring about a lasting peace and allow civilization to advance."³⁶ The conclusion of the Indian and buffalo era closed the final frontier in America.

E. Effect on the Cross Timbers

Was it just a mere coincidence that the Cross Timbers grew in a northerly direction or did the buffalo migration prevent an expansion in any other direction? The buffalo moved as if following the point of a compass and his trail was so dependable that it was commonly used for orientation.³⁷

³⁶Garretson, American Bison, p. 128.

³⁷Branch, Hunting Buffalo, p. 120.; and from Laura V. Hamner, Short Grass and Long Horns, p. 27. (It was said, "The buffalo went south in winter until they reached the warm region of the Cross Timbers and came back when grass rose in the spring.")

To be sure, the buffalo required an object to rub off his winter coat and trees were suitable instruments. Frequently, buffalo would become over-zealous and damage trees. Therefore, the outer edges of the Cross Timbers could have been forced to maintain their shape.

Any attempt to expand the forest by nature's over-production, only encouraged more buffalo to feast upon the seed (acorn). The buffalo spent his winters basking in the warm Texas sun, drinking the cool artesian water, visiting the salt licks and grazing on the abundant food. The soil was rich and matted with their favorite grass but as Horace Greeley expressed the results after a buffalo herd passed an area, "It is all eaten down like an over-taxed sheep-pasture in a dry August."³⁸ Only grass could perpetuate year after year on the prairies under such conditions.

The existence of buffalo may be observed in relation to the terrain through a cartographic study.³⁹ The maps on the Cross Timbers dating from 1789 to about 1850 indicate only a single strip of trees generally situated in

³⁸Branch, Hunting Buffalo, p. 121.

³⁹The Cartographic collection has been included as Part II.

the obvious north-south direction.⁴⁰ With the extermination of the buffalo the land was freed for the development of an additional forest which became known as the Western Cross Timbers. This forest area has been so recorded on subsequent maps.

⁴⁰Telegraph and Texas Register, January 6, 1841, page 2, column 3 (Mr. Hunt joined Colonel Cooke's expedition to the Cross Timbers as the engineer and he described it as, "This singular belt of woods extends from the east bank of the Brazos almost due north to Red River.").

C H A P T E R I V

SAVAGE TO SETTLER

A. The Original Indian

The Indian that lived within the Cross Timbers possessed a character which was considerably different from that of the more notorious Comanche. The Comanche was a hostile, nomadic plainsman and a proficient horseman, whereas the Caddo of the forest was a docile, stable and dependable agriculturalist who dwelled with his traditional past in the Cross Timbers. This tribe was known by several different names and had been influenced by the French, Spanish, and Americans.¹ They previously lived on the south bank of the Red River where the timber line met a beautiful prairie surrounded by a pleasant and fertile country. This spot had been the residence of their ancestors from time immemorial.² A man named Boon from Kentucky told Mr.

¹These Indians were called Caddo, Caddoes, Caddoques, Cadadoquis, and Cadaux.

²Sibley to Dearborn, April 5, 1805, American State Papers, IV, No. 113, 9th Cong., 1st Sess., "Lewis and Clark's Expedition," p. 721.

Dunbar about the Caddoes back in 1804. He said, "The . . . nation is [located] about fifty leagues above the raft, and near to their village commences the country of the great prairies, which extends four or five hundred miles west, in the Sand mountain, as they are termed."³

The Caddo tribe had a traditional legend about this mystic location in which not only the Caddoes believed, but many other small Indian tribes confirmed. According to legend, the Caddoes believed that the Great Spirit had placed a single family on a hill; then a tremendous deluge washed away and drowned all the other people. From this single family, it was believed, "all Indians have originated."⁴ Many small tribes claim to be descendants of this original clan, and Indians travel a great distance to pay a devout and sacred homage.⁵ The Caddo Hill is still a designated location in Johnson County; it is just south of Fort Worth (see maps attached as enclosures number 22 and 23).

³Ibid., p. 742. (This location is near the site known today as the Spanish Fort on the Red River. The raft was a natural dam that developed on the Red River.)

⁴Sibley to Dearborn, April 10, 1805, American State Papers, IV, No. 113, 9th Cong., 1st Sess., p. 721.

⁵Ibid., p. 729.

Many years before Louisiana was ceded to Spain, the French erected a small fort at a place now called Spanish Fort, in Montague County. Soldiers were assigned to guard a factory which had been established for Indian trade. Several French families settled in the vicinity and constructed a flour mill. Wheat was their main agricultural product which they successfully cultivated for several years. The French abandoned this area in 1780 and moved to a new site called Compti on the Red River; this new settlement was located about twenty-five miles north of Natchitoches.⁶ It was not until the turn of the nineteenth century that the irons and stones of the old mill were knocked down.⁷

The Caddoes evacuated this sacred spot somewhere around 1790 because of a dreadful sickness that had plagued them and the constant wars with the hostile Osage tribes of the north. They moved down the Red River and found a comfortable position, but were driven from this location every year when the river flooded. Large trees jammed

⁶Ibid., p. 728. (France gave the Louisiana Territory to Spain in 1763, at which time the French began to evacuate. The French settlement was still located at Compti in 1805.)

⁷Sibley to Dearborn, April 10, 1805, American State Papers, IV, No. 113, 9th Cong., 1st Sess., p. 721 and p. 729.

and choked the river at a point below their new home and frequently caused these inundations.⁸

By 1805 the entire number of what they called warriors of the ancient Caddo nation was reduced to about one hundred individuals. This handful of dignified Indians was looked upon somewhat like the Knights of Malta, or some distinguished military order. They were brave in face of danger or death, and boasted that they had never shed the blood of a white man. In addition to the braves there were old men and strangers who lived in their village. Like most Indian tribes, there were more women than men. The Caddoes had about 250 squaws in their camp.⁹

The nation of the Caddoes had a great influence over many other tribes.¹⁰ Almost all indigenous Indians of the southwest spoke the Caddo language and looked up to them as their fathers. It was common practice to visit and intermarry with this ancient group. In time of hostility

⁸Ibid.

⁹Ibid.

¹⁰Caddoes influenced the following tribes: Yattassees, Nandakoes, Nabadaches, Inies or Tackies, Nacogdoches, Kaychies, Adaize and Natchitoches.

the tribes would band together, especially against the Osage Indians of the north.¹¹

One of the complaints of the Caddo tribe was that the Choctaw nation invaded the hunting grounds of North Central Texas; then the Choctaws¹ lied and called the Caddoes lazy thieves. Sibley reported in 1805 that there had been misunderstandings between these tribes for several years. When small hunting parties met, they would fight for survival. Normally, the Caddoes were peaceful and devoted their time to agriculture. They raised corn, beans and pumpkins. They owned a few horses and other domestic animals but no dogs. Most of them had guns and some had rifles.¹²

Shortly after the United States purchased Louisiana several eastern tribes were recognized west of the Mississippi River. The Caddoes came in contact with two such bands. A group of the Alabamas migrated from West Florida and settled near the Caddoes, who had no objections to

¹¹Sibley to Dearborn, April 5, 1805, American State Papers, IV, No. 113, 9th Cong., 1st Sess., p. 721.

¹²Ibid. (Mr. Bevel provided much of the information for Sibley's report. Bevel spent his life in the west; in fact, he was born at the old Caddo village, which makes his data concerning the Caddo tribes fairly reliable.)

this peaceful tribe.¹³ The Choctaws moved in larger groups of restless, rambling bands. They were always at war with the Caddoes and were liked neither by the red nor white man.¹⁴

John Sibley, still a resident of Louisiana, warned Stephen F. Austin in 1826 that the United States Government was placing more than fifty thousand Indians of different tribes in the area north of Texas and Louisiana on the Red and Arkansas Rivers. This action, Sibley believed, would hasten their extinction, and further, not all of these Indians were hostile savages. Sibley stated: "the Caddos and Quapas are going to settle above you on the same river--they will be peaceable, but unprofitable neighbours [sic]."¹⁵

¹³Ibid., p. 724.

¹⁴Ibid., p. 725.

¹⁵Eugene C. Barker, The Austin Papers, II, p. 1456. (It was this same movement of Indian Tribes by the United States which resulted in the establishment of the Indian Territories as displayed by the map included as enclosure 6.)

The Caddo Tribe is truly a Texas Indian and has made but few slow migrations. It is said that the United States paid the Caddo tribe \$800,000.00 in 1834 to leave the country and never come back, and so the Caddo returned to his home in Texas, happier and richer.)

The heritage of the Caddoes remained in this area of the Cross Timbers for many years. Lieutenant A. W. Whipple of the Topographical Engineers explored a route in 1853 for the railroads near the thirty-fifth parallel. It was on this trip that he was visited by two Indians. Vincente, the interpreter, was required to examine them.

They understood neither Comanche, Spanish, nor English; but our little interpreter was by no means disconcerted at that. With occasionally a word in Caddo, which to some extent seems to be used by all the tribes of this region, and signs, such as are comprehended by the universal Indian race, a rapid conversation was carried on. The graceful motions of the hands seemed to convey ideas faster than words could have done, and with the whole operation, we were highly amused and interested.¹⁶

The next day Whipple planned to continue his journey. "In Vincente's pantomime and Caddo, we inquired the direction to the old wagon trail."¹⁷ The Indians volunteered as guides and led them to the trail in the Cross Timbers.

B. The Plains Indian

According to Walter P. Webb, "The Plains Indians

¹⁶Lieutenant A. W. Whipple, Reports of Explorations and Surveys, III, Senate Ex. Doc. 78, 33rd Cong., 2d Sess., p. 22.

¹⁷Ibid.

constituted for much longer time than we realize the most effectual barrier ever set up by a native American population against European invaders in a temperate zone."¹⁸

It is significant that the Comanche Indian feared the forest that separated him from the white man's civilization.

During the summer of 1834, Colonel Henry Dodge conducted an exploration into the Indian country. Lieutenant T. B. Wheelock recorded the details of the Dodge trek in a journal. According to Wheelock, the objective of this expedition was to bring friendly relations between the several hostile tribes. Colonel Dodge invited members of each tribe to send representatives back east to meet the United States President. One of the Chiefs states, "We do not like to pass through the timber, it will be hard for our horses to pass through the thick timber country between us and the white man."¹⁹ The next day Ta-we-que-nah, the principal chief of the Comanches, arrived and was also invited to visit the American President with the other

¹⁸Webb, The Great Plains, p. 48.

¹⁹Lieut. T. B. Wheelock, "Journal of Colonel Dodge's Expedition," August 26, 1834, American State Papers, V, Military Affairs, No. 585, 23rd Cong., 2d Sess., p. 373.

chiefs. He replied, "If I go with you I shall be afraid to come back through the timber."²⁰ Col. Dodge pledged to all chiefs that a safe-conduct escort would be furnished for their return trip.²¹ On July 25, 1834, the group departed with the Indian chiefs to visit the white man's civilization on the other side of the Cross Timbers. After a two-day journey they reached some small thickets and the "Roaring River." It was at this point that the brave Comanche chiefs abandoned the peace party claiming that they could not continue because of the sickness of a squaw.²² The fearless Indian of the Great Plains would not penetrate the Cross Timbers. Therefore, the Caddo Indians seldom, if ever, came in contact with the Comanches and were separated by this natural boundary.

C. Spanish Explorations

The Spanish explorers, in search of the famous seven

²⁰Lieut. T. B. Wheelock, "Journal of Colonel Dodge's Expedition," August 26, 1834, American State Papers, V, Military Affairs, No. 585, 23d Cong., 2d Sess., p. 379.

²¹Ibid., p. 380.

²²Ibid., p. 381.

cities of Cibola with their alleged streets of gold, traveled through the Cross Timbers. In fact, according to R. T. Hill, some of these fabulous cities may have been located within this area. In 1541, Francisco Vázquez de Coronado traveled in Texas,²³ and Hill believed there was every indication that Coronado was near the Cross Timbers.²⁴ It was during this exploration that Castañeda recorded the growth cycle and survival within the timbers,

The trees grow so thick that they were not noticed until one was right on the edge of them. . . . There are paths down into these, made by cows when they go to the water, . . . people follow the cows, hunting them and tanning the skins to take to the settlements in the winter to sell.²⁵

In 1542 Fernando de Soto's expedition continued on their march after his death on May 21, 1542. De Soto's successor was Luis Moscoso de Alvarado, who traveled in the area of the Cross Timbers.²⁶ Robert T. Hill explains the probable routes taken by Moscoso,

²³Charles Neider, ed., The Great West, p. 19.

²⁴Robert T. Hill, "Were the Seven Cities of Cibola in North Central Texas?" Dallas Morning News, Sept. 1, 1935, III, pp. 9-10.

²⁵George P. Winship, "The Coronado Expedition, 1540-1541," Fourteenth Annual Report of the Bureau of Ethnology, p. 6. (The term cow was frequently used to designate the female buffalo.)

²⁶Buckingham Smith (trans.), "Narratives of the Career of Fernando de Soto in the Conquest of Florida as told by a Knight of Elvas," in Documents of Texas History, p. 4.

He (Moscoso) traveled up the side of the Red River to Aayes in Cooke County and thence to Soacitino (Spanish Fort) and next south to the Waco and Navasota vicinity. . . .

Province of Aayes which Hodge locates on Grand Prairie southward of Gainsville, just west of the lower Cross Timbers and to a place called Soacitino beyond Aayes, on the western borders of the Cross Timbers . . . south of Waco (Gussco). From Soacitino both Coronado and Moscoso traveled southward toward Waco and the province of Navasota. Apparently Moscoso was following Coronado's southward path.²⁷

It is quite possible that the Cross Timbers may have been the defilade which influenced both of these explorers to use the same route. This theory becomes credible when substantiated by further evidence furnished by Hill.

The ancient trail between the "Towash" (Toavaya) villages of the Red River and the Brazos bids fair to be known as a prehistoric national highway. It followed the Grand Prairie between the upper and lower Cross Timbers. It probably followed near Village Creek, within ten miles of Fort Worth and twenty miles of Dallas.²⁸

Don Martín de Alarcón led an expedition on an overland

²⁷Robert T. Hill, "Were the Seven Cities of Cibola in North Central Texas?," Dallas Morning News, Sept. 1, 1935, III, pp. 9-10.

²⁸Robert T. Hill, "Roots of Texas History," Dallas Morning News, March 19, 1936, II, p. 7. (Since Fort Worth and Dallas are thirty miles apart, this route must have passed between the cities and along the edge of the Cross Timbers.)

trip which was to link Florida and Texas. Fray Céliz from Coahuila accompanied the party as the chaplain of the expedition and wrote a diary. It was learned that the French from Louisiana had penetrated into the Cross Timbers. Céliz stated in 1718, "Later we crossed the monte-grande. The name fits it, since it is necessary to bring a guide in order to go through it, because it is so wooded and entangled. . . ." ²⁹

The Spanish sent out another expedition in 1778 as a campaign against the Apache Indians. This group was led by Athanase de Mézières to invade the areas of the Tonkawa and Wichita Indian tribes. This trip took the party clear to the upper Red River. The Monte Grande (Big Forest) called Galvan was located on his route. This forest was the Cross

²⁹Fray Francisco Céliz, Diary of the Alarcón Expedition into Texas, 1718-1719, p. 85. (The footnote on this page stated, "Literally: great woods. From the directions given, the monte grande must have been northeast of present Bushy Creek (las Animas). Rivera in 1728 crossed the monte grande about two leagues northeast from the lower reaches of Bushy Creek.")

From Pichardo's Thesis, it is said of Rivera, "From here, the forest (Monte) called Grande, beginning at a distance of two leagues, to the arroyo de San Agustin, in the direction of the east-southeast." (Charles Wilson Hackett, Pichardo's Treatise on the Limits of Louisiana and Texas, Vol. I, p. 335 and Vol. IV, p. 376.)

Timbers, and because it contained a great number of oaks and other trees was difficult to penetrate. The timber belt along the Brazos below the mouth of the Little River was, in the early days, called Monte Grande and was part of what was later called the Eastern Cross Timbers.³⁰

Early efforts to explore the Spanish Territory near the Red River, which normally included the Cross Timbers, were encouraged by President Thomas Jefferson and supported by the United States Congress. In Jefferson's message to the Ninth United States Congress, dated February 19, 1806, the President stated: "I add Doctor Sibley's account of those residing in, and adjacent to, the territory of Orleans," and "The examination of the Red river itself, is but now commencing."³¹ All trips, however, into the area were unsuccessful for many years. A limited amount of information was furnished by Doctor John Sibley, who had moved to Natchitoches in 1803. Sibley mustered the aid of Mr. Brevel and

³⁰Herbert Eugene Bolton (trans. and editor), Athanes de Mézières and the Louisiana-Texas Frontier, 1768-1780, p. 308.

³¹Thomas Jefferson to the Senate and House of Representatives of the United States, February 18, 1806, American State Papers, No. 113, 9th Cong., 1st Sess., "Lewis and Clark's Expedition," p. 706.

Mr. Grappe, and all other hunters to furnish the basic facts.³² In the winter of 1804-05, William Dunbar and Doctor George Hunter started up the Red River into the Cross Timbers, but ended up in the vicinity of the present-day Hot Springs, Arkansas.³³ Thomas Freeman started up the river in 1806 but was stopped by a large Spanish force.³⁴

Other Americans made unofficial trips into this Spanish possession, such as Philip Nolan. Nolan was a filibuster who drove wild horses out of Texas for a profit. In March, 1801, he was killed by the Spanish near the present site of Waco on the edge of the Cross Timbers.³⁵

It may be said that the Spanish, while they owned this area, contributed very little to the accumulated knowledge

³²John Sibley to General Henry Dearborn, April 10, 1805, American State Papers, No. 113, 9th Cong., 1st Sess., p. 730.

³³William Dunbar, Esq., and Dr. Hunter, "A description of the Washita river, in Louisiana, and the country bordering thereon--compiled from the Journals of William Dunbar and Dr. Hunter," American State Papers, No. 113, 9th Cong., 1st Sess., "Lewis and Clark's Expedition," p. 731.

³⁴Dan Elbert Clark, The West in American History, p. 409, and William H. Goetzmann, Army Explorations in the American West, p. 36.

³⁵Ellis P. Bean, "Memoir of Ellis P. Bean," in Henry Yoakum, History of Texas, I, pt. 1, p. 56, and J. A. Quintero, "Philip Nolan and His Companions," Texas Almanac, 1868, p. 60.

of the Cross Timbers. In fact, the Latin influence forbade explorations into the unknown lands of North Central Texas.³⁶

D. The Indian Removal

The Cross Timbers was the winter home for the buffalo and the nomadic Indians. Therefore, the settlers could not occupy with the usual desirable contentment until such time as this barrier to settlement was either removed or controlled. The problem was certainly not reduced in the province of Texas when, by the act of March 28, 1830, the United States Congress provided for the removal of all Indians to the land west of the Mississippi River. Naturally this Congressional decision consolidated the savages in an area beyond the frontier but directly north of Texas. Included in this act was the authority for the President to protect the Indian by stopping inner-tribal wars. To accomplish this protection it was proposed that two lines of military posts be established by the federal government. The first line of defense was to border the Indian country in the state of Missouri and the Arkansas territory. The

³⁶Mrs. Mary Austin Holley, Texas, p. 4.

other line was to be established in the interior on the western line of the agricultural district extending from the Red River to the Upper Missouri River.³⁷ This was to be a north-south line, and oddly enough, running in the same direction as the Cross Timbers. It was further recommended that a post be located on the Red River near the western boundary of habitable lands (see map enclosure 6), such as above the "Fausse Washita."³⁸ This post would be pegged in the Cross Timbers as the southern end of the line. The Red River, of course, was to be the boundary between United States and the Mexican province of Texas. Therefore, the requirements for the line of military posts was stated:

[It] is indispensably necessary to keep in check the Indians that reside in Texas, but who, in pursuit of the buffalo, spend much of their time within the bounds of the United States, and from whom danger is apprehended by the emigrant Indians in that quarter.³⁹

³⁷Mr. H. Everett, Report, Regulating the Indian Department, House of Representatives, Report No. 474, 23rd Cong., 1st Sess., pp. 91-92.

³⁸Ibid., p. 93.

³⁹Ibid., p. 94.

The problem of the Texas Indian was left up to Mexico and the Anglo-American settlers. Both nations on each side of the Red River rejected the nomadic redman. Stephen F. Austin ordered a group of military forces against the hostile Comanche Indians as early as 1827.⁴⁰

E. Texas and the Cross Timbers

The Cross Timbers of Texas was an area with which little or no historical information was recorded prior to the Texas Revolution, as it was a physical barrier between the civilized white man and the savage redskin. Mary Austin Holley explains that this was unknown land because of the hostile Comanche Indian.⁴¹ Then, later in her book, she added that little information had been handed down because the Spanish forbade explorations and the preparation of maps.⁴² In 1836 she stated, "that such a region existed, has, indeed, been known; but in respect to its geography

⁴⁰The operations order for the military movement is included as a part of the map by S. F. Austin attached as enclosure two.

⁴¹Mrs. Mary Austin Holley, Texas, p. 77.

⁴²Ibid., p. 4.

and natural resources, clouds and darkness have rested upon it."⁴³

The editor of the Caddo Gazette with a small party of men visited a portion of the Cross Timbers in the winter of 1836, and considered this sight as resembling a fence which became more magnificent as they approached. When the fresh herds of buffalo began to arrive, they decided to leave before the appearance of the wild Indians.⁴⁴ John Henry Brown describes the area as of the autumn of 1837. Brown writes: "Northeast Texas, was an unpeopled wilderness, excepting in its occupancy by roving tribes of hostile savages."⁴⁵

During the years following the Texas Revolution, it was not uncommon for the Texans to organize a military force and move against the Indians of West Texas. In 1837 Captain William M. Eastland organized a company of fifty volunteers at La Grange, on the lower Colorado River. On their return trip they "traveled south along the prairie,

⁴³Mrs. Mary Austin Holley, Texas, p. 1.

⁴⁴Telegraph and Texas Register (Houston), April 27, 1842, p. 2.

⁴⁵John Henry Brown, History of Dallas County Texas, p. 5.

but always near the timber for protection, if attacked."⁴⁶ Lieutenant A. B. Van Benthuisen took a party of eighteen men from Captain Eastland's company and traveled over a different route which caused them to encounter a group of fifty hostile Indians. By using the woods for their defensive position they were able to defeat the Indians, but only eight Texans came out of the fight alive, and three of these were wounded.⁴⁷

On December 10, 1838, Mirabeau B. Lamar became the third President of the Republic of Texas,⁴⁸ and immediately instituted policies designated to obtain information concerning the Cross Timbers. No longer was this area to be left to the normal processes of nature and as a stronghold for the savage Indians.

Two years earlier, in 1836, Holley wrote of the possibility of having the American trade from Missouri to New Mexico diverted to the seaports of Texas.⁴⁹ It was

⁴⁶Brown, History of Dallas County, p. 6.

⁴⁷Charles Adams Gulick (ed.), The Papers of Mirabeau Buonaparte Lamar, I, p. 592.

⁴⁸Rupert N. Richardson, Texas the Lone Star State, p. 445.

⁴⁹Holley, Texas, p. 58. (Such a trade route would pass near or even through the Cross Timbers.)

this same interest that stimulated Lamar into action. On December 21, 1838, the Texas President delivered his first message to Congress in which he suggested a plan to open such trade. He stated, "with the idea of cultivating the friendship of these states [of Mexico] toward Texas, and with the added hope that it might enable the Texans to secure a more definite knowledge concerning the intervening country."⁵⁰ But the hostility of the Indians presented a barrier to Lamar's scheme of commercial expansion. He therefore suggested that a war be opened against the Indians which would result either in their extermination, or their expulsion from the territory of Texas. He asked that a line of military posts be established for the dual purpose of protection, and of serving as a base from which warfare against the Indians could be prosecuted more vigorously.⁵¹

The Texas Congress immediately provided for the raising of a regiment for the protection of the frontier. These men were to serve as "rangers."⁵² The proposals concerning

⁵⁰William Campbell Binkley, The Expansionist Movement in Texas, pp. 44-45.

⁵¹Lamar's message to Congress, December 21, 1838, (Lamar Papers, Archives, Texas State Library).

⁵²Binkley, Expansionist Movement in Texas, p. 45.

western trade were also taken up, and on January 24, 1839, a joint resolution was passed, authorizing the president to open trade with the inhabitants along the Rio Grande.⁵³ Then on February 21, President Lamar issued a proclamation, in which he stated that such trade could now "be legally carried on" between the two regions. Preliminary action was required, however, before merchants could be expected to invest in a completely new field.

The steps to accomplish President Lamar's program were threefold: first, to defeat the Indian; second, to construct a military road with posts; and third, to install a trade route to Santa Fé. Perhaps it would be well to examine the Lamar programs in detail:

(1) The Campaign against the Indians

In 1838 a military campaign was initiated against the Indians on the Trinity River and in the Cross Timbers. Hugh McLeod, a West Point graduate, accompanied the expedition as adjutant and furnished Lamar with reports of the progressive details. Brigadier General John H. Dyer was the troop commander, and he ordered Captain Mansfield

⁵³Binkley, Expansionist Movement in Texas, p. 45.

Torrance to take a company of forty men to destroy a group of Caddoes.⁵⁴ The Indians were warned of the attack and retreated into a canebrake to hide.⁵⁵ McLeod explained that not all of these Indians were Caddoes, hinting that many Indians were invading Texas from the United States. After the troops were placed in position, on December 1, 1838, he wrote: "Let us drive these wild Indians off, and establish a line of blockhouses, and we have done all we can now. . . ." Then McLeod adds: "If the U.S. is faithless enough to refuse to remove them [the Indians] we must wait a more auspicious moment than the present to exterminate them." He continues: "I have just heard from a gentleman from Clarksville that the Kickapoos are crossing Red River with their families & going back to Missouri. . . ."⁵⁶ On December 20, McLeod writes of a possible location of a post in that area, "I think Genl. Rusk intends establishing all the three month's men, in secure garrison, at or near the three forks."⁵⁷ The Three

⁵⁴H. McLeod to M. B. Lamar, November 21, 1838, Gulick (ed.), The Lamar Papers, II, p. 298.

⁵⁵Ibid., November 23, 1838, p. 302.

⁵⁶Ibid., December 1, 1838, p. 308.

⁵⁷Ibid., December 20. 1838, p. 341.

Fords was a location on the Trinity River near what is now known as Fort Worth on the edge of the Cross Timbers.

Upon learning that General Dyer might not exterminate the Indians but simply drive them northward, to possibly return later, Albert Sidney Johnston, the Texas Secretary of War, proposed to Lamar that the strength of the army be doubled under General Thomas J. Rusk. The army could then terminate the hostile Indian menace in the Texas northern frontier.⁵⁸ But on the same day General Rusk wrote to Lamar: "We met no hostile [sic] Indians and in fact no Indians but Kickapoos."⁵⁹ This meant the termination of the campaign, ended the congressional support, and the eventual reduction of the Texas army.

A third letter was written on this same day by Hugh McLeod to Lamar in which McLeod stated:

The Army had endured enough in their estimation to entitle them to return home, when the Genl. [sic] overtook them at the Trinity, and without provisions, they marched from there, thro' the cross timbers, found and destroyed the Caddo villages, and marched across a barren or dead prairie to the Brazzos-- When the men became exhausted it was found necessary to return.

⁵⁸Ibid., Johnston to Lamar, January 9, 1839, p. 404.

⁵⁹Ibid., Rusk to Lamar, January 9, 1839, p. 405.

That Section of Country and particularly the cross timbers (frequently represented as a sterile waste) is the finest portion of Texas, as a body- and its bottoms are equally as fine as the Brazzos.

P.S. This Section has suffered immensely, at this time so doubtful is the community of having the line run, that men with 10 & 20 hands are moving back to the U. States, from that uncertainty, and fear of the Indians together- There is no emigration to it.⁶⁰

From this letter we find one of the very first descriptions of the Cross Timbers by an individual who actually visited the area; McLeod gave his true opinion of the value of the Cross Timbers. This certainly gave Lamar confidence to continue his frontier program. The expeditions against the Indians continued as preparations were made for the next phase.

In 1841 Generals William A. Smith and Tarrant led troops into the Indian country.⁶¹ In August, 1842, General Edward Burleson with about 120 men went north into the wilderness to suppress the Indians. However, none of these military efforts were successful. It appears that each time a military force marched the Indian spies would pass the word which led the troops in a merry chase.

⁶⁰McLeod to Lamar, January 9, 1839, Gulick (ed.), The Lamar Papers, II, p. 406.

⁶¹Telegraph and Texas Register (Houston), September 1, 1841, p. 3.

They would be forced to return home exhausted and discouraged.

So little good has, heretofore, resulted from expeditions of this kind that we have long since become convinced that, some more effectual method must be adopted to check the incursions of the savage. Every year some expedition is fitted out and marches in pompous parade for fifty or a hundred miles into the Indian country, with no other effect than to amuse the wiley savages, who doubtless in many instances hover about it at a respectful distance, and watch all its movements with as much unconcern as they watch the movements of a herd of buffalo. After marching leisurely over a small tract of country it returns, and often while the commander is writing out his report of the campaign, a party of adventurous savages who had dogged the trail back to the settlements are stealing horses in the very neighborhood.⁶²

The Texans gave up their Indian chase at least for a short time and continued to work on the Lamar Program.

(2) Military Road

The next phase of the Lamar program was the construction of a military road with a line of posts. William H. Hunt had been selected as the engineer for this trip, and he became concerned because of the inactivity. On May 11, 1839, he wrote to Lamar: "the Sec. of War informed me that

⁶²Telegraph and Texas Register (Houston), August 31, 1842.

my services on the military road will not be required for at least two months."⁶³ In December, 1839, Albert Sidney Johnston, the Texan Secretary of War, submitted a plan to Congress for protecting the western frontier. He proposed that a line of military posts be established "in such a manner as to embrace the settlements already established, and to cover those districts which need only protection, to induce their immediate settlement."⁶⁴ Johnston suggested that this line of frontier posts should begin on the Red River near Coffee Trading House and run southward with the next post near the west fork of the Trinity River, in the Cross Timbers, or approximately the present location of Fort Worth. The third fort was to be near the junction of the Bosque and Brazos Rivers.⁶⁵ On July 16, 1840, J. S. Lester of La Grange wrote to Lamar, and stated:

⁶³William H. Hunt to M. B. Lamar, May 11, 1839, Gulick (ed.), Lamar Papers, II, p. 570.

⁶⁴Albert S. Johnston, Report of Secretary of War, to Texas House of Representatives, December 18, 1839 (Army Papers, Archives, Texas State Library).

⁶⁵William Campbell Binkley, The Expansionist Movement in Texas, p. 50.

There was a gentleman of respectability, at the city of Austin from Red River, who stated that there were upwards of One hundred families anxiously, awaiting there in anticipation of the Road being marked, & opened, from the City of Austin to Red River, as is provided for by an act of Congress; which if it was done, I think would be of infinite advantage to this part of the Republic in the reception of emigrants, as well as in extending the whole frontier from here to Red River; and with the establishment of three or four garrisons, properly manned, on said road would give considerable protection to our whole north western frontier; consequently, all the country below would settle up Immediately.

I saw colo. [sic] Burleson, and he told me that all was ready & and he was willing & ready to go & mark & open the road whenever Ordered, to do so by the proper authority.⁶⁶

In the notes of President Lamar it was learned that the military road was planned to commence at the mouth of the Kiamichi branch of the Red River and to extend south to the Nueces River.⁶⁷

Colonel William G. Cooke soon succeeded Colonel Edward Burleson as commander of the regulars in the Texas Army, and he was ordered to take charge of the expedition to survey a military road from the north. The designated

⁶⁶J. S. Lester to M.B. Lamar, July 16, 1840, Gulick (ed.), Lamar Papers, III, p. 420.

⁶⁷M. B. Lamar, Notes on the Troops & Military Posts, Gulick (ed.), Lamar Papers, II, p. 386.

route was almost a direct line from Austin to Bonham,⁶⁸ and on to Fort Towson, Arkansas.

This was to be the first official expedition into the Texas Cross Timbers. Cooke started north from Austin, arriving at Waco village on September 17, 1840, where the necessary supplies were to be accumulated for the trip.⁶⁹ The immediate objective was to march to the Trinity River. The march northward was very slow, averaging only about eight miles per day. According to Cooke, the Indians kept in contact with the column and took advantage of the weak points by scattering their cattle and supplies. The abundance of buffalo from the Little River to the Brazos assisted as provisions, but as the party approached the Trinity, the game became scarce.⁷⁰

It was at this time that Cooke decided that it would be impossible to reach the Red River with the slow wagons and hungry men. He split the party, leaving part at a camp on the Trinity River under the command of Lieutenant

⁶⁸Bonham was then known as Fort English and the home of a worthy pioneer named Bailey English. Brown, History of Dallas County, p. 6 (see Map, enclosure 9a).

⁶⁹Brown, History of Dallas County, p. 7.

⁷⁰Cooke to Archer, November 14, 1804, (copy attached as enclosure 9b).

Colonel A. Clendenin,⁷¹ and moved the rest of the command north to the Red River camp. The guide claimed it would be a two-day trip, but Cooke planned on five days. On the fifth day they came in contact with a dense thicket, through which an additional five days were required to penetrate the forest. On the north side they located a trail which led the detachment to the house of Bailey English on the Bois d'Arc fork of the Red River. Colonel Cooke stated, "We were received very hospitably and furnished with supplies, after having been without beef for twenty-two days."⁷² Wagons were sent with relief supplies to the men that had been left behind on the Trinity. By November 3, 1840, the Trinity River soldiers had eaten most of their mules and were starved out. The next day another party arrived from the south only to find a note from Clendenin. Then on November 5, the relief train from the north arrived. When it was learned that nothing could be done, the group headed north to join Colonel Cooke. It was on this trip that four men skirted the

⁷¹Telegraph and Texas Register (Houston), January 6, 1841, p. 2.

⁷²Cooke to Archer, November 14, 1840 (copy attached as enclosure 9b).

thicket and made the journey in four days instead of the original eleven.⁷³ This short cut stimulated a complete change of plans; Colonel Cooke determined from his surveys that the road designated by the Texas Congress would have terminated at the mouth of the Kiamichi on the Red River. This original route would have left an unprotected group of settlers in a hundred-mile area. Therefore, he proposed to establish the new line of posts along the borders of the Cross Timbers.⁷⁴

Mr. Hunt, who accompanied the expedition as an engineer, defined the Cross Timbers as a singular belt of woods extending from the east bank of the Brazos River almost due north to the Red River, about forty miles above the False Washita.⁷⁵

On November 14, 1840, Colonel Cooke made an official report from his camp at Fort English to Branch T. Archer, the Texas Secretary of War. Cooke wrote, "after traveling through a country hitherto almost unknown, and encountering all the difficulties incident to such a march, reached

⁷³Brown, History of Dallas County, p. 8.

⁷⁴Telegraph and Texas Register (Houston), January 6, 1841, p. 2.

⁷⁵Ibid.

Red River, and selected a very judicious point above the settlements on that stream, for the establishment of the first post."⁷⁶ This post was reported as being on Mineral Creek near Coffee's Station. The second post was to be on the Trinity at a place called Cedar Springs.⁷⁷ This road was "staked" through the prairies and "blazed" through the timber, but not opened through the timbered regions until 1843.⁷⁸

In 1841, H. L. Upshur drew a sketch map showing the route taken by the Cooke Expedition (see enclosure 9a). On this document it is easy to see why Colonel Cooke spent eleven days on a trip which would normally take about four. In this case it was the Haw Thicket and not the Cross Timbers that provided an obstacle to his travel. Also displayed is the obvious reason for changing the northern terminating point of the military road from the Kiamichi River to Coffee Station, thereby protecting some of the settlements

⁷⁶Cooke to Archer, November 14, 1840 (copy attached as enclosure 9b), and Lamar's Message to Congress, December 2, 1840, in Texas Congressional House Journal, 5th Cong., 1st Sess., p. 211.

⁷⁷Telegraph and Texas Register (Houston), January 6, 1841, p. 2. (Later became the city of Dallas.)

⁷⁸Brown, History of Dallas County, p. 9.

already established on the east side of the Cross Timbers. It should be noted by the orientation indicator on the map that this sketch is not drawn in a north-south direction. It is canted slightly to the left. When properly oriented it may be observed that the Cross Timbers is situated in a north-south direction. A copy of Colonel William G. Cooke's report to B. T. Archer has been attached to the Cooke map by Upshur. In the last paragraph Cooke reported, "I am told by Mr. Coffee that he with many of the settlers were about the leave, but that our arrival has altered their determination."⁷⁹ Therefore, the Cooke Expedition gave a feeling of security to the settlers.

The editor of the Telegraph and Texas Register, Francis Moore, Jr., of Houston, predicted the future of this natural route along the Cross Timbers by stating, ". . . probably in one or two years, will become the main highway from the northeastern settlements to the Capitol."⁸⁰ He also wrote,

⁷⁹William G. Cooke to B. T. Archer, November 14, 1840 (Army Papers, Archives, Texas State Library). (See enclosure 9a.)

⁸⁰Telegraph and Texas Register (Houston), January 6, 1841, p. 2.

The late expedition of Col. Cooke to Red River, has at length enabled us to define with accuracy the topography of the Cross Timbers, which have hitherto been almost a terra incognita to the great part of our citizens.⁸¹

Having a better understanding of the terrain in the north of Texas, President Lamar was ready to start the third phase of his program, a trade route to Santa Fé, New Mexico.

(3) The Trade Route to Santa Fé

In the spring of 1841 the prospects appeared rather dim. The Texas Congress had neglected to enact the desired legislation. In fact, when the appropriations to pay the army were not passed, the troops were disbanded.⁸² On his own initiative Lamar encouraged the organization of the expedition. By May, 1841, six companies had been raised and Brevet Brigadier General Hugh McLeod, a veteran of many previous Indian expeditions, was placed in command.⁸³ Colonel William G. Cooke and William H. Hunt left the Military

⁸¹Telegraph and Texas Register (Houston), January 6, 1841, p. 2.

⁸²Binkley, Expansionist Movement in Texas, p. 69.

⁸³George P. Garrison (ed.), Diplomatic Correspondence of the Republic of Texas, II, p. 741.

Road project to join this Santa Fé effort; therefore, the leaders of the Texan Santa Fé Expedition were acquainted with the Cross Timbers area.

William G. Cooke and two other commissioners were designated to accompany the troops with special instructions concerning the political aims of the mission addressed from the Texas President.⁸⁴ Thomas Falconer, an Englishman, was invited to travel with the party in the interest of science.⁸⁵ George W. Kendall,⁸⁶ the editor of the New Orleans Picayune, was permitted to accompany the expedition as the official historian.⁸⁷ William H. Hunt and Samuel Howland were the guides, neither of whom had previously made the trip directly from Texas to Santa Fé. Hunt had surveyed the military road to the Red River in 1840 while Howland had no knowledge of the country at all, but had lived in Santa Fé.⁸⁸

⁸⁴Garrison (ed.), Diplomatic Correspondence of the Republic of Texas, II, p. 740.

⁸⁵Ibid., p. 742; and Thomas Falconer, Letters and Notes on the Texan Santa Fe Expedition, p. 9.

⁸⁶George W. Kendall, the historian of the expedition, included a map with his publication dated 1844, Narrative of the Texan Santa Fe Expedition on which a single strip of trees is shown and the party traveled through this area, known as the Eastern Cross Timbers. A copy of the Kendall's map has been attached as enclosure 13.

⁸⁷George Wilkins Kendall, Narrative of the Texan Santa Fe Expedition, I, p. 14

⁸⁸George R. Nielsen, "Mathew Caldwell," Southwest Historical Quarterly, LXIV, p. 490.

Both favorable and discouraging reports were filed concerning the journey through the Cross Timbers. William G. Cooke reported, "After many unexpected delays and embarrassments, that retarded our march beyond the time anticipated for our arrival in Santa Fé, we at length on the 29th August, reached a point on the Palo Duro a tributary of Red River."⁸⁹ Then Kendall obtained a more favorable impression of the Cross Timbers, and he wrote:

The immense western prairies are bordered, for hundreds of miles on their eastern side, by a narrow belt of forest land well known to hunters and trappers under the above name [Cross Timbers]. The course of this range is nearly north and south, with a width ranging from thirty to fifty miles. The growth of timber is principally small, gnarled, post oaks and black jacks, and in many places the traveller will find an almost impenetrable undergrowth of brier and other thorny bushes. Here and there he will also find a small valley where the timber is large and the land rich and fertile, and occasionally a small prairie intervenes; but the general face of the country is broken and hilly, and the soil thin. On the eastern side of the Cross Timbers the country is varied by small prairies and clumps of woodland, while on the western all is a perfect ocean of prairie.⁹⁰

⁸⁹Cooke to Secretary of State of Republic of Texas, November 9, 1841, Chihuahua, Mexico, Garrison, Diplomatic Correspondence of the Republic of Texas, II, p. 778.

⁹⁰Kendall, Narrative of the Texan Santa Fe Expedition, p. 110. Another description of the Cross Timbers was made at about this same time by Josiah Gregg, an enterprising businessman who desired to expand his investments by new

This is a fairly complete description of the area as of the fall of 1841.

F. Settlements in the Cross Timbers

The establishment of the military road by Cooke reassured the settlers that the frontier was once again pushed back and the Cross Timbers partially cleared for occupation. A proposal was made to grant free land within a twenty-mile

trade. It should be noted that while this report is not of an area within the boundary of Texas, it does give an adverse criticism of the Cross Timbers.

On Tuesday, April 7, 1840, Gregg recorded his impression of the Cross Timbers in his diary which is quoted as follows:

"This morning passed without trouble what some call the seven-mile Swamp, and nooned a little east of Swamp Creek, in a handsome little prairie with good grass--passing through skirts of the Cross Timbers."

"These Cross Timbers are dismal, roughly grown up with various kinds of undergrowth, grape-vines, green briars, etc., all so thickly matted that man or beast can scarcely pass through them without a road. Should our frontier Indians engage in war again with U.S. I fear these Cross Timbers will afford them a hiding place and shelter as formidable as the swamps of Florida. They are from 10 to 30 or 40 miles wide, running from S.E. to N.W., passing from Little Rock to the North Fork within view of the route we came." (From Maurice Garland Fulton (ed.), Diary and Letters of Josiah Gregg, p. 68.)

area of this road which was to encourage settlement, and at the same time, provide a buffer zone against the Indians.

A bill is now before [the Texas] congress to provide that a tract of land extending to the distance of twelve miles on each side of this road, shall be reserved and sectionized; and that any person who may reside five years within this belt of land, shall receive a grant of six hundred and forty acres if a head of a family, and three hundred and twenty if a single man. This bill will probably be passed this session. Should it become a law, the military posts established by Col. Cooke will immediately become the nuclei of settlements; and thus this belt may within a few years be filled with hardy pioneers who will form an impenetrable bulwark against the northern savages.⁹¹

Colonel Cooke's expedition proved to be very successful. The Indians began to move their families from the northern frontier of Texas. Several rangers traveled through the area and stated that the Indian trails were leading from this country in the direction of north and northwest. The rangers believed that the tracks of children from the area was an indication that the Indians would not return. The Telegraph and Texas Register reported about the Indians of North Texas, "They were induced to believe, that the families are moving beyond the Cross Timbers."⁹² The article

⁹¹Telegraph and Texas Register (Houston), January 6, 1841, p. 2, column 3.

⁹²Telegraph and Texas Register (Houston), August 18, 1841, p. 2, column 1.

continued by pointing out that these were the "docile Indians" who inhabited the north central forests of Texas; these people were described as, ". . . so cowardly and imbecile that they would scarcely oppose any obstacle to the advance of the frontier settlements."⁹³ It was not absolutely certain that the area was cleared of Indians. Therefore, a fall campaign was conducted against the Trinity Indians within the Cross Timbers. The Texas Army under Generals Smith and Tarrant marched to the West Fork of the Trinity River on July 24, 1841, but found the area deserted. On September 1, 1841, the Telgraph and Texas Register reported:

This campaign has been productive of immense advantage, as it has proved that the Indian forces east of the Cross Timbers is entirely dispersed, and not an Indian village remains in this section. A vast region of fertile territory has been redeemed from the savage domination; abounding in the most beautiful scenery.⁹⁴

The campfires were extinguished but the ground still warm as the settlers moved on the same spot previously occupied by the Indians.⁹⁵ Rapid settlements sprang up near

⁹³ Telgraph and Texas Register (Houston), August 12, 1841, p. 2, column 1.

⁹⁴ Ibid., September 1, 1841, p. 3, column 3.

⁹⁵ Ibid., October 20, 1841, p. 2, column 4.

the Trinity River and a general survey of the new line of settlements was reported by the Telegraph and Texas Register:

The settlements have extended so far up this river, that they are already connecting with those of Red River; and it is even now in contemplation to connect the waters of the two streams by a canal.⁹⁶

On May 25, 1842, this same newspaper reported the following about the settlement in the Cross Timbers:

Mr. Warfield arrived day before yesterday from the Cross-Timber. He stated twenty-five families arrived in that section a few weeks since, and have formed a new settlement on the Trinity, at the place crossed by Col. Cooke while exploring the military road.⁹⁷

It is interesting to note how the settlers took advantage of their land which included the two opposite terrain conditions, forest and prairies. The inhabitants settled on the outer edge of the Cross Timbers, constructed their houses to face into the trees and cultivated the prairie in the back yard. The timber was cleared leaving a rich soil which would produce excellent crops.⁹⁸

⁹⁶Telegraph and Texas Register (Houston), February 23, 1842, p. 2, column 3.

⁹⁷Ibid., May 25, 1842, p. 3, column 2.

⁹⁸I. R. Worrall, "Northern Texas," Texas Almanac, p. 150.

All was not harmony within this newly found paradise. The American frontiersmen were not properly adjusted to endure the lingering diseases that infested the Cross Timbers. In the summer of 1834 Colonel Henry Dodge assumed command of an expedition when Brigadier General Henry Leavenworth became sick and died within the Cross Timbers. Malady struck the regiment of this expedition with such force that nine companies were reduced and reorganized into six.⁹⁹ While en route the troops were burdened with thirty-nine additional cases of fever. Dodge decided to establish a field hospital and left the infected men to be treated.¹⁰⁰

Sickness among the settlers was very common. A captain in the Texas Army could not participate in the 1842 Indian Campaign because his family was ill.¹⁰¹ In 1849 Lieutenant William H. C. Whiting reported the unhealthy condition located between the Brazos and Red River when considering a possible military installation in that

⁹⁹Lieut. T. B. Wheelock, "Journal of Colonel Dodge's Expedition," August 26, 1834, American State Papers, V, No. 585, 23d Cong., 2d Sess., p. 375.

¹⁰⁰Ibid., p. 376.

¹⁰¹Telegraph and Texas Register (Houston), February 23, 1842, p. 2, column 3.

area;¹⁰² Whiting explained in detail why the poor situation prevailed:

The Trinity, a rapid stream, to which belong many tributaries, is subject to very sudden rises. Unlike the rivers to the southwest, its valley is a level flat, between which and the Great Prairie there is but one descent. From two to three miles wide, and covered with a dense growth of trees and underwood, this is by the freshets converted into soft mud; and when the water subsides, it leaves to the sun a mass of rotted vegetable matter and half-dried mud, whence the constant sickness in the country is engendered. Fever and ague prevail through the whole year, and the troops have suffered from it very much.¹⁰³

In 1868 an article in the Texas Almanac reported on the health condition of the Cross Timbers region of northern Texas:

The inhabitants of this region call it healthy; but it must be acknowledged that, though not afflicted with malignant diseases, ague and fever prevail but too generally over the entire section; and in the autumn bilious remittents are not uncommon.¹⁰⁴

Several years before, Jacob De Cordova, land agent and colonizer in the north-central Texas area, issued a warning

¹⁰²Reports of the Secretary of War, Senate Ex. Doc. No. 64, July 26, 1850, 31st Cong., 1st Sess., p. 238.

¹⁰³Ibid., p. 241.

¹⁰⁴I. W. Worrall, "Northern Texas," Texas Almanac, 1868, p. 148.

to immigrants who planned to move into the Cross Timbers. He wrote, "If you settle in timber-land, get a dry spot and let the sun shine on you; don't cut down every shade-tree, though. Keep away from marshes and ponds where the water is stagnant. . . ." ¹⁰⁵ De Cordova continues, ". . . keep away from the groves of islands of timber, where the trees are large, undergrowth heavy and ground low and damp. Many early settlers suffered from living on the verge of such, tempted by the shade and shelter." ¹⁰⁶

Poor health was not the only hazard within the Cross Timbers. The failure of the government to adequately suppress the Indian activity was still evident in 1868, when it was reported that,

Outside of the upper cross timber the Indians are "masters of the situation," the line of distant (from each other) United States posts, located just outside, being scarcely able to maintain their positions. The people in the upper cross timber and along its eastern prairie border for fifteen miles are constantly annoyed and depredated upon by, and are in constant conflict with, the red skins, and have been since the settlement of that section, now some ten or twelve years [U]ntil some entirely different and more efficient plan shall be adopted by the general government, the border will continue to repeat

¹⁰⁵J. De Cordova, Texas: Her Resources and Her Public Men, p. 26.

¹⁰⁶Ibid., p. 27.

the oft-told tale of all Indian frontiers--murder, theft, arson, and all the train of evils at which civilization shudders.¹⁰⁷

The effective method of removing the Indian menace was later discovered to be rather simple, such as by encouraging the destruction of the buffalo as suggested by General Philip Sheridan in 1875. The removal of the buffalo starved out the Indian and led to his ultimate elimination as a problem to civilization. With these two forces removed, it would be possible for a new freedom to develop and still be within the laws of vegetable growth. Natural conditions could encourage the forest of the Cross Timbers to meander as if directed by chance and the inclination of the four winds. This action combined with the demand of the frontiersmen for wood may possibly be a reason for the development of a new forest now called the Western Cross Timbers, and a corresponding reduction of the forest once known as the Eastern Cross Timbers.

¹⁰⁷I. R. Worrall, "Northern Texas," Texas Almanac, 1868, p. 151.

C H A P T E R V

CONCLUSIONS

This paper has been presented as an institutional and environmental history of the area in north central Texas known as the Cross Timbers. An attempt has been made to prove several interesting points concerning this unique forest.

First, the origination of the Cross Timbers. In the beginning there was darkness and the earth was formed. The addition of light brought the climatic conditions and temperature changes with wind and rain. This marked the initial chain of reactions which has constantly modified the earth's environment. A natural balance of favorable conditions existed to encourage the reproduction of vegetation. In Texas a forest developed because the principal natural influences--such as rainfall, nature of the soil, temperature, sunlight, and winds--were all in the proper balance. This forest became very thick and extremely difficult to penetrate by either man or beast. The reproduction process each year was contained within the limits of the same space.

Next, the type of trees in this Cross Timbers was mainly oak, but more specifically post oak, blackjack oak, hackberry, and overcup oak. Illustrations of these trees were made available in Chapter II.

Third, the American bison furnished an influence in the Cross Timbers. The presence of large quantities of natural salt attracted wild animals, and especially the buffalo. This strange bovine became an invader of nature's sanctuary, the Cross Timbers. The oak forest provided a prolific supply of acorns each year which the buffalo used to satisfy his hunger during the winter months when most grass was dormant. Normally the buffalo thrived in the great open wilderness and expanded his herd to a number beyond estimation. This mass of animals migrated south each winter to avoid the cold wind and in search of food to replace the dried, withered grass in the north. The tremendous number of stamping hooves over a period of several centuries has certainly influenced the unusual shape of this forest. The buffalo moved along the edge of the Cross Timbers, not only devouring the reproductive seed, but tramping down the opportunity for a youthful plant to survive. Buffalo instinctively migrated to take advantage of the different seasons and to obtain available food

supplies. The animal ate the acorn, trampled the soil, and irritated the bark of the trees. It was from the natural habits of the buffalo that the forest belt was restricted to certain limits. Therefore, the Cross Timbers was formed in a position known historically as northward, like the needle of a compass, pointing towards polaris. The Comanche Indian followed the buffalo, but feared penetration of the forest, leaving the Caddo tribe within this peaceful paradise.

Fourth, it was learned from an Indian legend that the Central Texas tribes believed that the first American Indian came from people living within the Cross Timbers. The Indian of the plains and the Caddo of the forest disturbed the expansion of civilization in the west. The plains Indian also set fire to the grass on occasions and let it burn to the edge of the trees. The buffalo and Indian forced the timber to retain its size and shape, and now a new force began to effect the density. The settler penetrated the area and used his axe to cut through the thick forest, providing himself with wood for fuel and shelter.

Fifth, the Cross Timbers attracted interest because it grew on the tops of hills, was positioned in a straight northerly direction, was located between two flat prairies,

and divided the humid vegetation area of the east from the arid desert of the west. This forest belt was avoided by early settlers because it presented unknown hazards and the Indian menace. The Spanish ignored the area and closed the frontier. The formation of the Republic of Texas brought with it an interest in the Cross Timbers. President Mirabeau B. Lamar instituted a three-phase program which led to the partial civilization of the Cross Timbers: (1) remove all the Indians, (2) build a military road with posts, (3) establish trade with Santa Fé. When the settlers moved into the Cross Timbers they learned of a constant fever which prevailed.

This natural but unconventional strip of trees once formed an obstacle which influenced the institutions with which it came in contact. Generally speaking, the Cross Timbers remained as a frontier in the history of the United States until the twentieth century. The buffalos, Indians, settlers, cattle drives, railroads, and our present-day highways all have felt the implications of this natural barrier. The Cross Timbers served as a well-known landmark for all who came in contact with its influence. The traders, trappers, and travelers frequently used this location, and the associated buffalo tracks, as a datum line for

orientation. These physical indicators were as important to the people of the west as Greenwich meridian was to the more popular parts of the world.

After the Civil War herds of cattle were driven north to meet the demands of a new industry. For this movement three trails were started in the vicinity of the Nueces River and all went north. The western trail terminated at Dodge City, passing around the west side of the Upper Cross Timbers. The Chisholm trail was in the center and went through the Grand Prairies, between the Eastern and Western Cross Timbers, to Abilene, Kansas. The Sedalia trail flanked the eastern edge of the Lower Cross Timbers.¹ Once again the Cross Timbers became victorious, this time by forcing the cattle drives to definite routes. As the Spanish had searched for the seven cities, the American had looked for horses, the Indians for buffalo, in 1880, the railroad advanced to meet the cattle drives. Here it is interesting to note that the railroad installation followed the same routes which had been previously established around the Cross Timers.

In conclusion it is pointed out that Part II of this

¹Ray Allen Billington, Westward Expansion, p. 676.

study is included to indicate the stages of development of the Cross Timbers, but more especially to show the major change which has occurred. The original area once known as the Cross Timbers has, in effect, been eliminated. There is insufficient timber growth in this area to justify the continuation of the title, "Lower or Eastern Cross Timbers." The Upper or Western Cross Timbers has developed as a timber area. Therefore, to obtain a visual observation of a Cross Timbers in Texas, it is necessary to travel to the area about sixty miles west of the location that has been historically designated as the Cross Timbers. (See Figure A.)

Development of the
Cross Timbers:
1840-1960

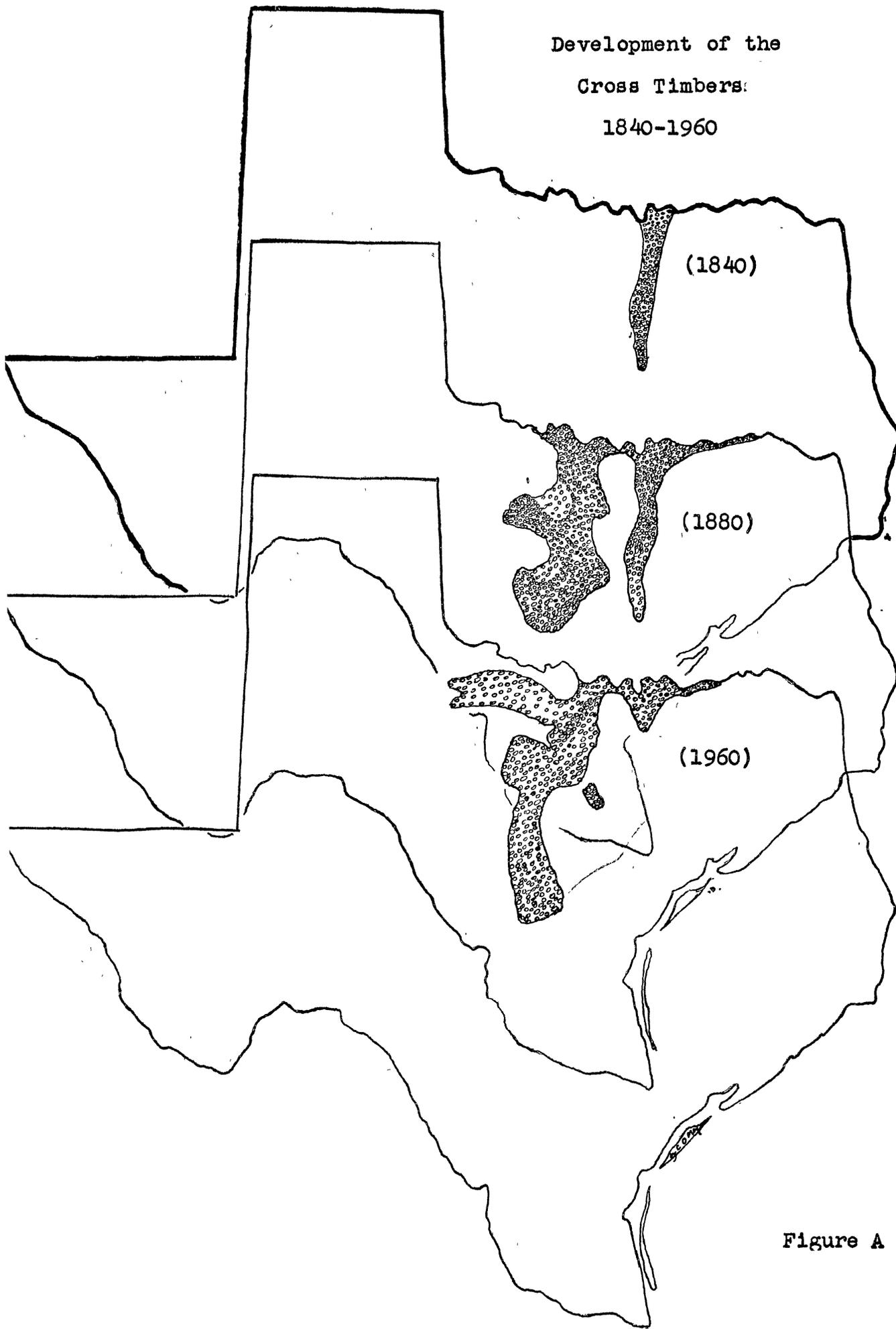


Figure A

P A R T I I

THE HISTORICAL CARTOGRAPHY OF THE CROSS TIMBERS

A. Introduction and Explanation

A collection of sketches, charts and maps has been accumulated and enclosed herewith to present a progressive pictorial description of the Cross Timbers and surrounding area from the earliest possible date to a period where maps would be available in ample supply for reference. Facsimiles of these documents have been included in this study with detailed descriptions to provide information not otherwise available.

The exact reproduction of the enclosures was sustained by a xerox process, where a contact print preserved the same size, shape and description of the original. In the few examples where the size of the original document exceeded the requirements, only that portion of the large map which included the Cross Timbers was recorded. When marginal information was available and could not be included on the one page, an additional exposure was taken to furnish proper authenticity. A few maps were reduced in scale from the original to present a variety.

While there is a technical difference between sketches, charts, and maps, this fact has been ignored in favor of a chronological order. Each document has been given an enclosure number and filed in this study by date.

Topographical reports have paralleled recorded history and many publications included a map or sketch as an illustration to describe the area. The unique shape and direction of the Cross Timbers has lent itself as an acceptable land mark even in the very early descriptions.¹ David Ingram wrote, in 1568, that the great woods appeared between two plains and consisted of delicate trees in the form of a hedge. "They being as [if] it were fet [made] by the hands of man."² Williams Kennedy states, ". . .[It] is so remarkable straight and regular, that it appears to be the work of art."³ The editor of the Caddo Gazette referred to the Cross Timbers as a fence.⁴ Mr. Hunt accompanied Colonel Cooke's expedition and described the area.

¹The Cross Timbers was called Monte Grande (big forest) by the Spanish (see enclosure 1).

²E. De Golyer, (ed.) The Journal of the Three Englishmen Across Texas in 1568, by David Ingram, p. 559.

³Kennedy, Texas, Its Geography . . . , p. 58.

⁴Telegraph and Texas Register (Houston), April 27, 1842, page 2, column 4.

This singular belt of woods extends from the east bank of the Brazos, near Toweash village above Aguilla, almost due north to Red River Its general direction is a few degrees east of north.⁵

Kennedy gives an excellent description of this strange shaped land mark,

The Cross Timbers, in its general direction, does not perceptibly vary from the true meridian. Dr. Iron (former Secretary of State of the Republic) a few years since accompanied a party of surveyors, who measured a line extending forty miles due south from the bank of Red River, near the Cross Timbers, and found, to their surprise, that the western border of the Cross Timbers continued parallel with this line through the whole distance. As might naturally be supposed, the Cross Timber forms the great landmark of the western prairies; and Indians and hunters when describing their routes across the country, in their various expeditions, refer to the Cross Timbers, as the navigators of Europe refer to the meridian of Greenwich. If they wish to furnish a sketch of the route taken in any expedition, they first draw a line representing the Cross Timbers, and another representing the route taken, intersecting the former. Thus a simple, but correct, map of the portion of the country traversed in the expedition, is at once presented to view.⁶

Stephen Fuller Austin, the father of Texas, was one of the many that drew sketches and used the Cross Timbers

⁵Telegraph and Texas Register (Houston), January 6, 1841, page 3, columns 3 and 4.

⁶Kennedy, Texas, Its Geography . . . p. 59.

as a basis for orientation.⁷ Among his other laurels Austin should be considered as the first topographer of Texas. Although his drawings were crude, the general information was of value in the progress of developing a map of the state. Austin collected sufficient data by about 1829 to present a sketch of Texas for publication.⁸ H. S. Tanner used this information to publish the first map of Texas which he included in his atlas of collected maps.⁹

Several forces retarded map development in Texas. While the demand for maps existed, the frontier, an unknown wilderness, discouraged movements. The Spanish forbade any mapping explorations in the area. When the Indians were consolidated west of the Mississippi River, topographical activity was suppressed. In fact, it was against the law in the United States to invade the Indian country without permission. A map of the Western Territory prepared in 1834 provided information of a general nature but lacked the essential details.¹⁰ During the

⁷Two such maps have been included as enclosure 2 and 3.

⁸See enclosure 4.

⁹See enclosure 5.

¹⁰See enclosure 6.

Texas Revolution (1836) some maps were prepared by private publishers.¹¹ However, the turning point for the Cross Timbers came in 1840 when Colonel William G. Cooke led a party of surveyors along the edge of the natural obstacle.¹² The Arrowsmith map of 1841 was one of the few maps under the title "Republic of Texas."¹³ The Emory map of 1844 was of great interest in the United States during the annexation debates.¹⁴ Great Britain's map by Moody¹⁵ show a remarkable resemblance to a properly authenticated map by J. De Cordova.¹⁶

The trees, known as the Cross Timbers, appeared on maps as a single strip until such time as the buffalo extermination reduced the great herds to such a number that additional trees could develop. By 1850 sufficient animals were removed from the masses to enable the new vegetation to appear. While it is not denied that some trees

¹¹See enclosures 7 and 8.

¹²See enclosure 9.

¹³See enclosure 10.

¹⁴See enclosures 12 and 14.

¹⁵See enclosures 15 and 16.

¹⁶See enclosure 17.

did exist in the area, now known as the upper Cross Timbers, it is evident that their existence was of minor importance. The writers and topographers who frequented this forest failed to record data which would prove otherwise. Apparently there was nothing that could be compared with the amazing spectacle of the (lower) Cross Timbers. This remarkable forest has an important historical division which is directly linked with the disappearance of the buffalo. One contemporary of the cattle drivers recognized the difference in tree growth. He observed that some land which had previously been open, flat and treeless was now displaying a beautiful growth of large trees.

Maps published after the Civil War were marked with greater detail. However, this data was not always accurate in every respect. It was common practice to project the anticipated man-made objects as a means of obtaining advance co-ordination.¹⁷ On the Roessler's map of 1874 the Cross Timbers was recorded in excellent detail but the routes were not always correct.¹⁸ This was confirmed by Colton's new map of Texas which was published two years

¹⁷See enclosures 22 and 23.

¹⁸See enclosure 22.

later.¹⁹ The Loughridge map of 1880 may be accurate for a study of cotton growth, but the area described as the Upper Cross Timbers was not like any other displayed.²⁰ The map of Charles S. Sargent may be considered as a dependable one because it properly displays the vegetation within the Cross Timbers as of that date.²¹

Each of the three maps prepared by Robert T. Hill contain some difference in the approach to the subject: The first map describes the topographic features,²² the second gives the geographic features,²³ and the third map concerns itself directly with the region known as the Eastern and Western Cross Timbers.²⁴ The map by William L. Bray was based upon the latest map by Hill and appears to be in general agreement.²⁵ It may be observed on both maps that

¹⁹See enclosure 23.

²⁰See enclosure 24.

²¹See enclosure 25.

²²See enclosure 26.

²³See enclosure 27.

²⁴See enclosure 28.

²⁵See enclosure 29.

the Eastern Cross Timbers takes a sharp turn to the right at the Red River.

The map assumed to be prepared by Lieutenant G. K. Warren is certainly worthy of consideration. A copy of this map is to be located in the rear pocket of the publication by William H. Goetzmann.²⁶ Goetzmann considers this map to be a landmark in American cartography. However, a question is raised over the routes taken by Lieutenant Francis T. Bryan. The map indicates that Bryan traversed over a route known to be taken by Lieutenant William H. C. Whiting in 1849.²⁷ Whiting took the trip along the military posts that rested on the edge of the Cross Timbers from Fort Scott to Fort Washita. This conflict is resolved by referring to the public documents, in which both officers made their reports.²⁸ Bryan went west to El Paso, while Whiting went north to Fort Washita on the Red River.

It should be noted that this collection brings one up

²⁶William H. Goetzmann, Army Explorations in the American West. (See enclosure 30.)

²⁷See enclosure 18.

²⁸Senate Executive Document, "Reports of the Secretary of War," No. 64, 31st Cong., 1st Sess., July 24, 1850, p. 24 and p. 245.

to the Twentieth Century, but it leaves another question. What is the present status of the Cross Timbers. The 1961-1962 edition of the Texas Almanac provides information of a usable nature. By taking the descriptive details of each county near the rear of this book, and with a state map that contains all 254 counties, one may reconstruct the formation of the Cross Timbers. This map would resemble the latest map by Hill. However, there is one exception, Denton County.²⁹ The terrain description places the county astride the border between the Black land belt and the Grand Prairie with no indication of the Cross Timbers.

The obvious question then arises over the status of the situation in Denton County. In deliberating this point one should understand the basic problem. The term "timber" is an indication of tree growth. Up to this point consideration has been given to both geological soil content and geographical terrain effect. But in analyzing the fundamental question one should limit the field to that of vegetation, since, historically speaking, the area gained its importance for this one reason.

²⁹Texas Almanac, 1961-62, p. 568.

To resolve the question which arose over the description of Denton County, it was necessary to make a field trip and inspect the area. During this trip it was noted that a small amount of oak was growing east of the township, Argyle, but other than that, there was no timber in Denton County.

The next question that came to mind was the accuracy of the descriptions of the other counties since they all formed an area that resembled an old map. From the historical data it was assured that the Lower Cross Timbers was an upland growth of oaks. During this trip it was determined that there was little evidence to support the existence of an Eastern or Lower Cross Timbers. Any resemblance to a description of what it appeared to be like a hundred years ago has long since disappeared. On this same inspection trip it was revealed that the Western Cross Timbers was progressively developing.

Could it be that we now have but one forest, only one Cross Timbers as it was once recorded? Is the present Cross Timbers now located about sixty miles west of that area so descriptively defined in our history? This search could not be concluded at this point because there was insufficient proof. The ground reconnaissance revealed

only that area near the roads, and more facts were required to verify such a rash idea. The solution was obtained by returning to a map study. Military maps prepared by the Army Engineers included vegetation and up-to-date copies would resolve this question in favor of one side or the other. By splicing the six sections together of a 1:250,000-scaled map revised as of April 5, 1961, it was obvious that the green thumb of the Western Cross Timbers stood out boldly across the face of the map. Then, only by strict imagination and with prior knowledge could one locate a slight resemblance to that area known as the Eastern Cross Timbers. Kennedy was right when he said, "Soon the scrutiny of science will be forever checked by the destroying axe of the pioneer."³⁰ In effect only one Cross Timber forest area is now in existence.³¹

³⁰Kennedy, Texas, Its Geography, Natural History and Topography, p. 59.

³¹A pictorial presentation is made showing the different stages in the development of the Cross Timbers. This document is prepared by superimposing three maps (1840, 1880, and 1960) on one map. (See Figure A.)

Development of the
Cross Timbers
1840-1960

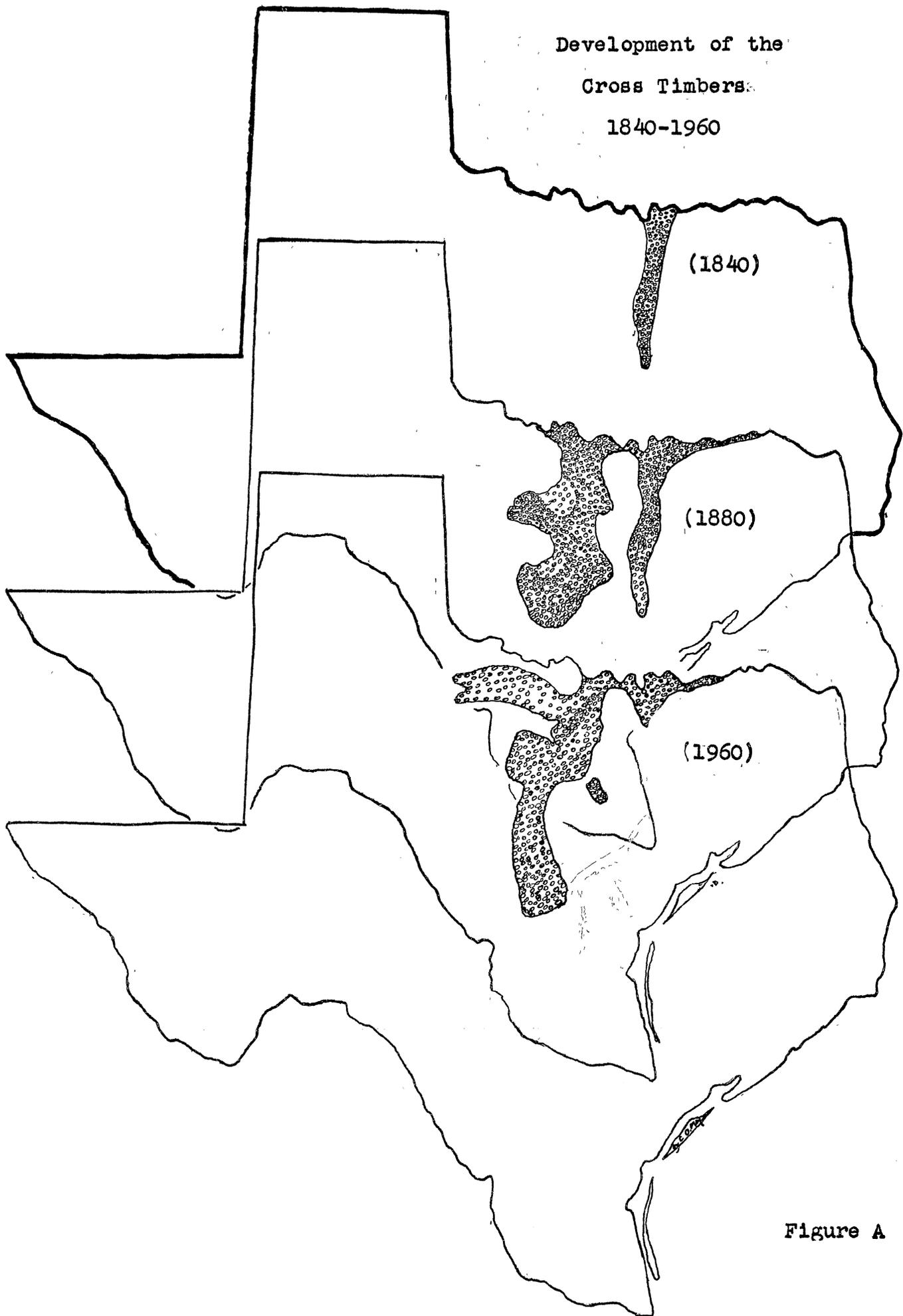


Figure A

B. A Cartographic History

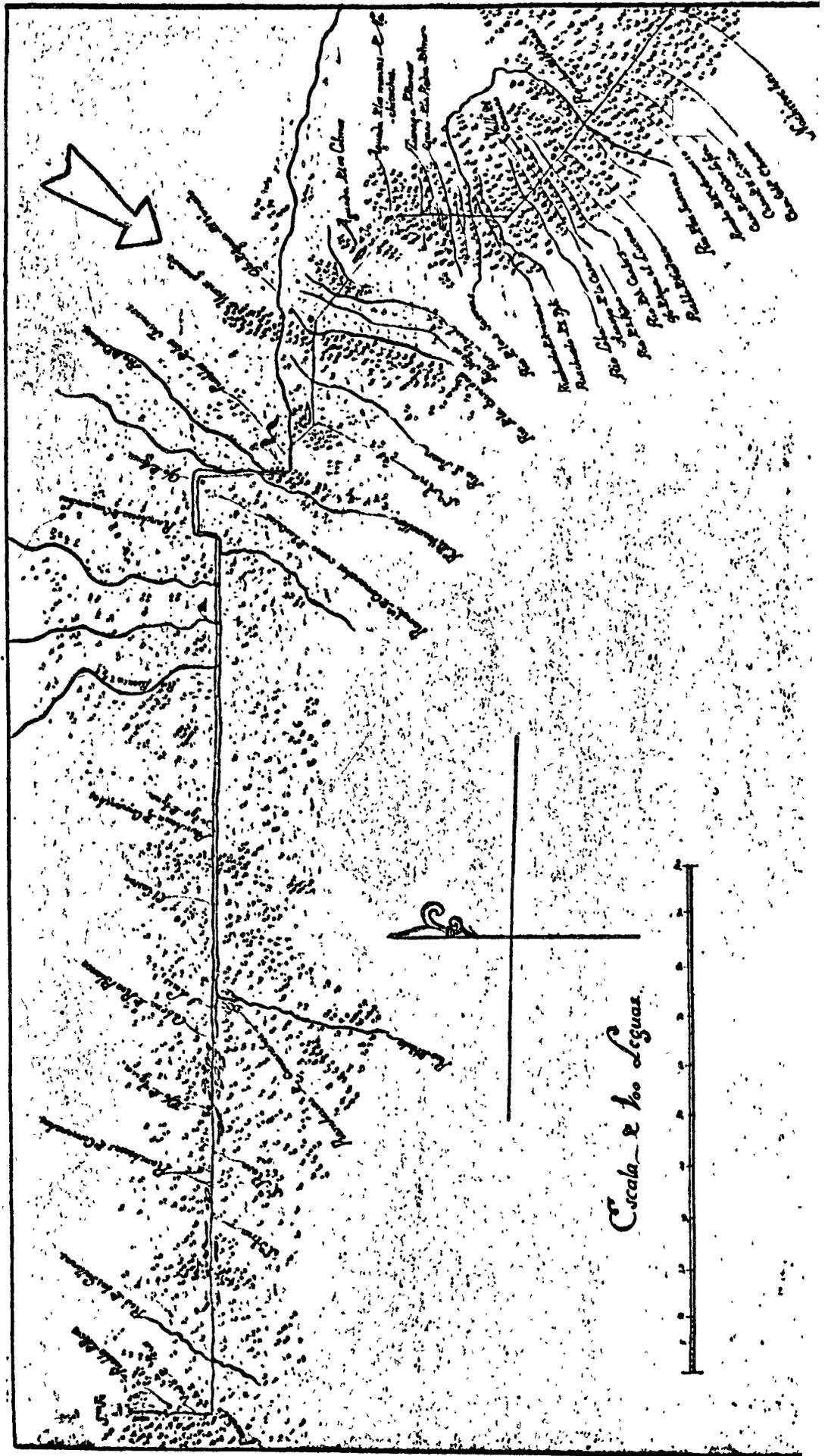
(Index)

Enclosure	Date	Title
1.	1789	[Spanish Sketch]
2.	1827	[Sketch] Map of the Country of the Comanches.
3.	1828?	[Sketch] [Map of North Central Texas]
4.	1829?	[Chart] [Stephen F. Austin's Map of Texas]
5.	1830	Map of Texas with Parts of Adjoining States
6.	1834	Map of the Western Territory &c.
7.	1836	Map of Texas
8.	1840	Texas
9.	1841	Sketch showing the Route of the Military Road from Red River to Austin
10.	1841	Map of Texas
11.	1842?	[Texas]
12.	1844	Map of Texas and the Country adjacent
13.	1844	Texas and Part of Mexico & the United States showing the Route of the First Santa Fe Expedition.
14.	1846	Map of Texas and Part of Mexico
15.	1849	Part of North Eastern Texas, Shewing the Route of the Inspectors.
16.	1849	Map of Texas

Enclosure	Date	Title
17.	1849	J. De Cordova's Map of the State of Texas
18.	1849	Reconnaissance of Routes from San Antonio De Bexar, El Paso Del Norte &c &c.
19.	1850	Topographical Map of the Road from Fort Smith, Arkansas, to Santa Fe, New Mexico, and from Dona Ana, New Mexico, to Fort Smith.
20.	1852	Map of the Country between the Frontier of Arkansas and New Mexico.
21.	1864	J. H. Colton's Map of Texas.
22.	1874	A. R. Roessler's Latest Map of The State of Texas.
23.	1876	Colton's New Map of the State of Texas.
24.	1880	Agricultural Map of Texas.
25.	1883	Density of Forest.
26.	1886	Salient Topographic Features of the State of Texas.
27.	1892	Geographic Features of the Texan Region.
28.	1900	Map of the Eastern and Western Cross Timbers of the Black and Grand Prairies of Texas and Southern Indian Territory.
29.	1904	Provinces and Minor Subdivisions of Greater Texas Region.
30.	1857?	Map of the Territory of the United States from the Mississippi River to the Pacific Ocean (Reprint - 1959).

1. Enclosure- One
2. Date- 1789?
3. Title- [Spanish Sketch]
4. Author- Anonymous (unsigned)
5. Purpose- Indicates a route from Santa Fe, New Mexico, to Natchitoches, Texas
6. Authenticity or location- The original is on file at The University of Texas Archives.
7. Description
 - a. General- The original map is in colors, framed and measures 50 X 29 cms. (the included copy has been reduced).
 - b. Cross Timbers- The Cross Timbers is indicated and marked in Spanish as Monte Grande (Big Forest). Also there is a large rock or mound on the sketch which may be to indicate the Rock of Mary. On this map the Cross Timbers extends in a Northeast direction and is represented by a single group of trees. The Trinity River is shown flowing parallel to the dense forest.
8. Comments- Until proven otherwise this is the first recorded map of the Cross Timbers. Baron Alexander von Humbolt prepared a map of the west but ignored the Cross Timbers; in fact, of the 272 maps included in Carl I.

Wheat's rare book, Mapping the Trans-Mississippi West
(from 1540 to 1811) none of the maps indicated the Cross
Timbers.



1. Enclosure- Two
2. Date- August 28, 1827, prepared at Bexar
3. Title- [Sketch] Map of the Country of the Comanches
4. Author- Stephen Fuller Austin, 1793-1836
5. Purpose- To be used to guide the three divisions of troops in a campaign against the Comanche Indians. The complete letter of instructions written on the map has been attached to the map.
6. Authenticity or location- The original is filed with the M.S. Stephen F. Austin collection at The University of Texas Archives.
7. Description
 - a. General- The sketch is drawn with dark brown ink on a bleached leather. This section shown is only that which pertains to the Cross Timbers. Note the trails leading from one Indian village to another and the three trails to Nacogdoches. This area covers the Brazos River and its tributaries. The sketch is oriented with north at the top.
 - b. Cross Timbers- S. F. Austin has this area extending north from the Brazos River to the Trinity River and turning Northeast. Once again the Cross Timbers is marked in Spanish as Monte Grande.

8. Comments- This sketch together with others to be shown, confirms Stephen F. Austin's native ability as a topographer. The General Plan of Campaign which was recorded on the map has been reproduced and placed immediately following the sketch as 2b and 2b' (on two pages).

Map of the country of the Comanches. Made by Stephen Austin in order to explain the plan of campaign against the said Indians.

The General Plan of Campaign

1. Three divisions of troops will be formed, the 1st in Bexar, the 2nd will be composed of the troops of New Mexico and Chihuahua, and the 3rd of the colony of Austin, of Nacogdoches, and of Peach Point.
2. The second division will enter the country of the Comanches from New Mexico, going toward the junction of the Salado river and the Clear Fork of the Colorado river.
3. The third division will enter [the country of the Comanches] in two parts, that is to say, the volunteers from the colony of Austin and from Nacogdoches will join each other in the old Pueblo of the Huecos [Wacos] and comprise one of the parts. This part will go up the Brazos from the said Pueblo to the mouth of the Tahcajunova River at which point it should join with the group from Peach Point. This [from Peach Point] group will come up the Red River and pass through the Pueblo of the Tahuayases. From the Tahcajuneva [river] this division will direct itself toward the juncture of the Salado River and the Clear Fork of the Colorado.
4. The first division will enter [the country of the Comanche] from Bexar and by the route through San Saba will go toward the juncture of the Salado River and the Clear Fork of the Colorado.
5. The second division should have arrived on the waters of the Colorado River, that is to say, between the Salado River and the

[Information recorded on the Map]

Clear Fork. The third division should have arrived on the Tahcojunova River before the advance from Bexar of the first division is past the Presidio of San Saba. The march of the respective divisions shall be regulated to conform to this.

6. At the advance of the first division the Indians will flee along the head of the Colorado River toward the Rio Grande or by way of Tahuayases toward the Red River. In the first case they will encounter the second division and in the second case they will encounter the third division and will find themselves completely enclosed and surrounded.

Notes:

In the winter the Indians occupy the country between the Tahcajunova River and the San Saba River, that is to say, at the heads of the Nuecis^{1512/} and San Andres Rivers and on the arroyas of the Colorado River. In the summer they go up by way of the Tahuayases to the north of the Red River; or by way of the head of the Colorado to the arroyas of the Rio Grande.

The best time for the beginning of the campaign is the month of September.

There is the item of 100 leagues from Peach Point to the Pueblo of the Tahuayases and the item of 70 leagues from Nacogdoches to the Pueblo of the Huecos.

Bexar 28th of August 1827

[Information recorded on the Map]

Enclosure 2 b'

1. Enclosure- Three
2. Date- 1828?
3. Title- [Sketch] [Map of North Central Texas]
4. Author- Stephen Fuller Austin
5. Purpose- Apparently this map was prepared to indicate both distances and days of travel between two points.
6. Authenticity or location- The original is on file with the M.S. Stephen F. Austin Collection at The University of Texas Archives.
7. Description
 - a. General- This map is the same as described in Enclosure two. However, the trails are omitted.
 - b. Cross Timbers- On this sketch the area is designated as both the Cross Timbers and Monte Grande and extends from Noland Creek on the Brazos River to the Red River.
8. Comments- This map is included to confirm the title as both the Cross Timbers and Monte Grande. It is believed that this is the first indication that the forest was called the Cross Timbers.

1. Enclosure- Four
2. Date- 1829?
3. Title- [Chart] [Stephen F. Austin's Map of Texas]
4. Author- Stephen Fuller Austin
5. Purpose- To provide a printed map of Texas
6. Authenticity of location- E. C. Barker Collection.

A tracing of the original is in the Austin collection at The University of Texas Archives.

7. Description

- a. General- The original map is without name, title, or date and it measures 66 X 81 cms, in color outline.

- b. Cross Timbers- Located in north central Texas is a single strip of trees on which is marked, "Cross Timbers, a strip of timbered land which extends through the prairie lands of Arkansas." The group of tree symbols is oriented in a north direction and extends from Waco village on the Brazos.

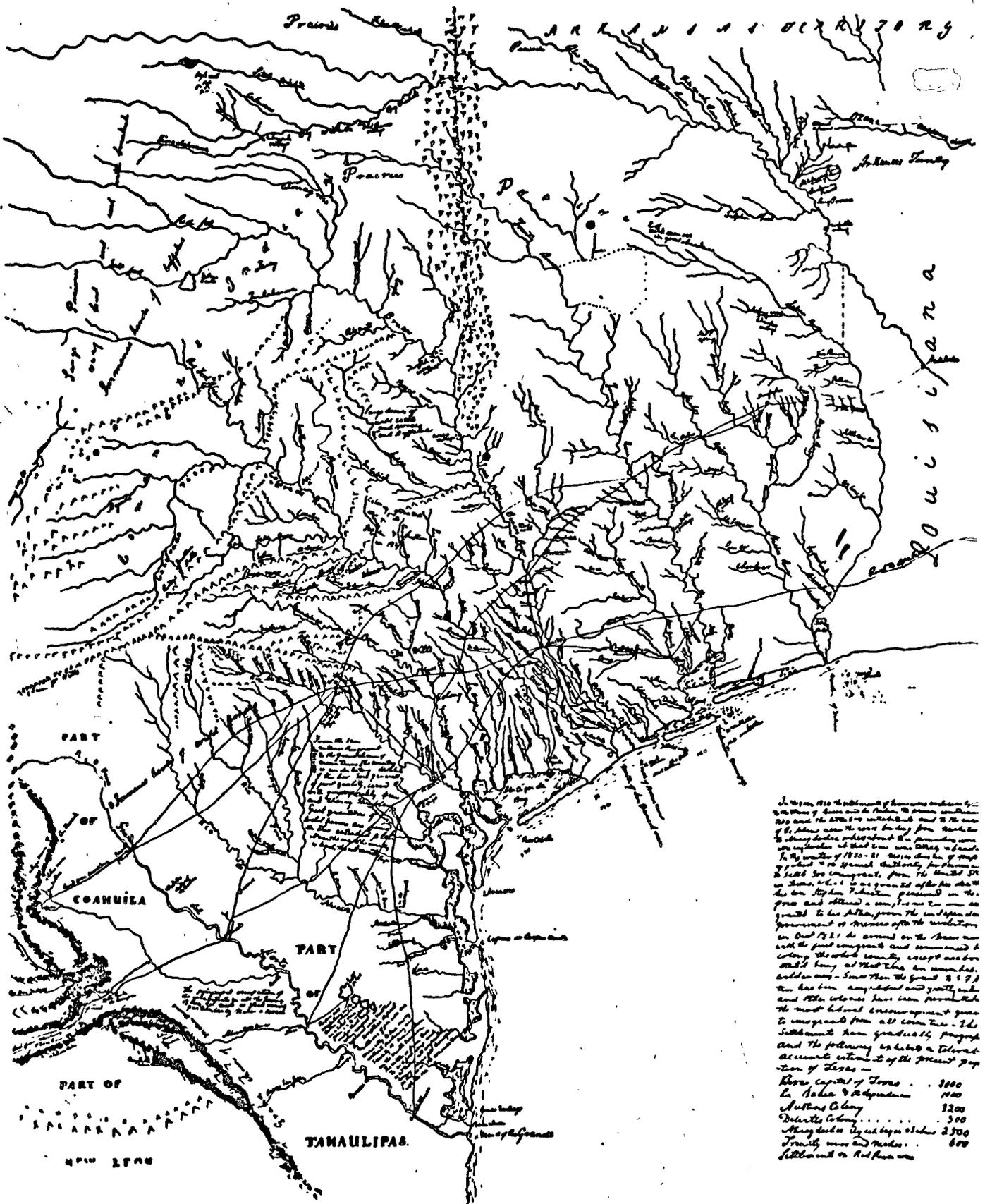
8. Comments- Austin wrote to his brother-in-law, James F. Perry, "If Tanner makes a good profit out of the map I sent him, he ought to give me one of his best bound

and last American Atllass, it is the best now extant and would be very useful to teach the children geography."¹

In reference to Texas, Mrs. Holley wrote, "No maps, charts or geographical notices were ever allowed by the Spaniards to be taken of it. The map, compiled by General Austin, and published by Tanner was the first geographical information of the country, that was published."²

¹Eugene C. Barker (ed.), Austin Papers, p. 446.

²Mrs. Mary Austin Holley, Texas, p. 4.



In 1820, the establishment of Texas was ordered by the Congress of the United States. The former territory was divided into three districts, and the Rio Grande was established as the western boundary of the territory. The territory was divided into three districts, and the Rio Grande was established as the western boundary of the territory. The territory was divided into three districts, and the Rio Grande was established as the western boundary of the territory.

Texas Capital of Texas . . . 3000
 La Bahia & Independence . . . 1000
 Austin Colony . . . 3200
 San Antonio Colony . . . 500
 San Antonio by all before 1820 . . . 2500
 French, Spanish and Mexican . . . 600
 Settled and to Red River was

1. Enclosure- Five
2. Date- 1830
3. Title- Map of Texas with parts of Adjoining States
4. Author- From data compiled by Stephen F. Austin and published by H. S. Tanner in Philadelphia on the 17 day of March 1830.
5. Purpose- Apparently this is the first printed map of Texas and is included in the Tanner Atlas.
6. Authenticity or location- A copy of the original is on file in The University of Texas Archives.
7. Description
 - a. General- This is a pocket map (to be folded) and measures 62 X 74 cms. The boundaries between the different colonies of the empresarios are colored.
 - b. Cross Timbers- This area is marked "Cross Timbers" and is represented by a single strip of tree symbols. The forest extends from the Brazos River to the Red River.
8. Comments- On this map only three areas are marked off for settlements. Both this map and the map indicated as item four have the following comment printed in West Texas, "Immence Herds of Buffalo," and each side of the Cross Timbers is marked "Prairie."

Tanner's Map of the United States and Mexico, dated 1825 (filed at the Texas State Archives) omits the details of this area.

This Tanner Map was republished in 1835 and included in the book by Samuel Harman Lowrie, Cultural Conflict in Texas, 1821-1835, Columbia University Press, New York, 1932.



1. Enclosure- Six.

2. Date- 1834

3. Title- Map of the Western Territory &c.

4. Author- Unknown

5. Purpose- This map was prepared to indicate the established boundaries between the newly formed Indian Country and the United States. Also to form boundaries between the different Indian Tribes.

6. Authenticity or location- It is included with the Report Number 474, to the 23rd Congress, 1st Session, House of Representatives, "Regulating the Indian Department," dated May 20, 1834.

7. Description

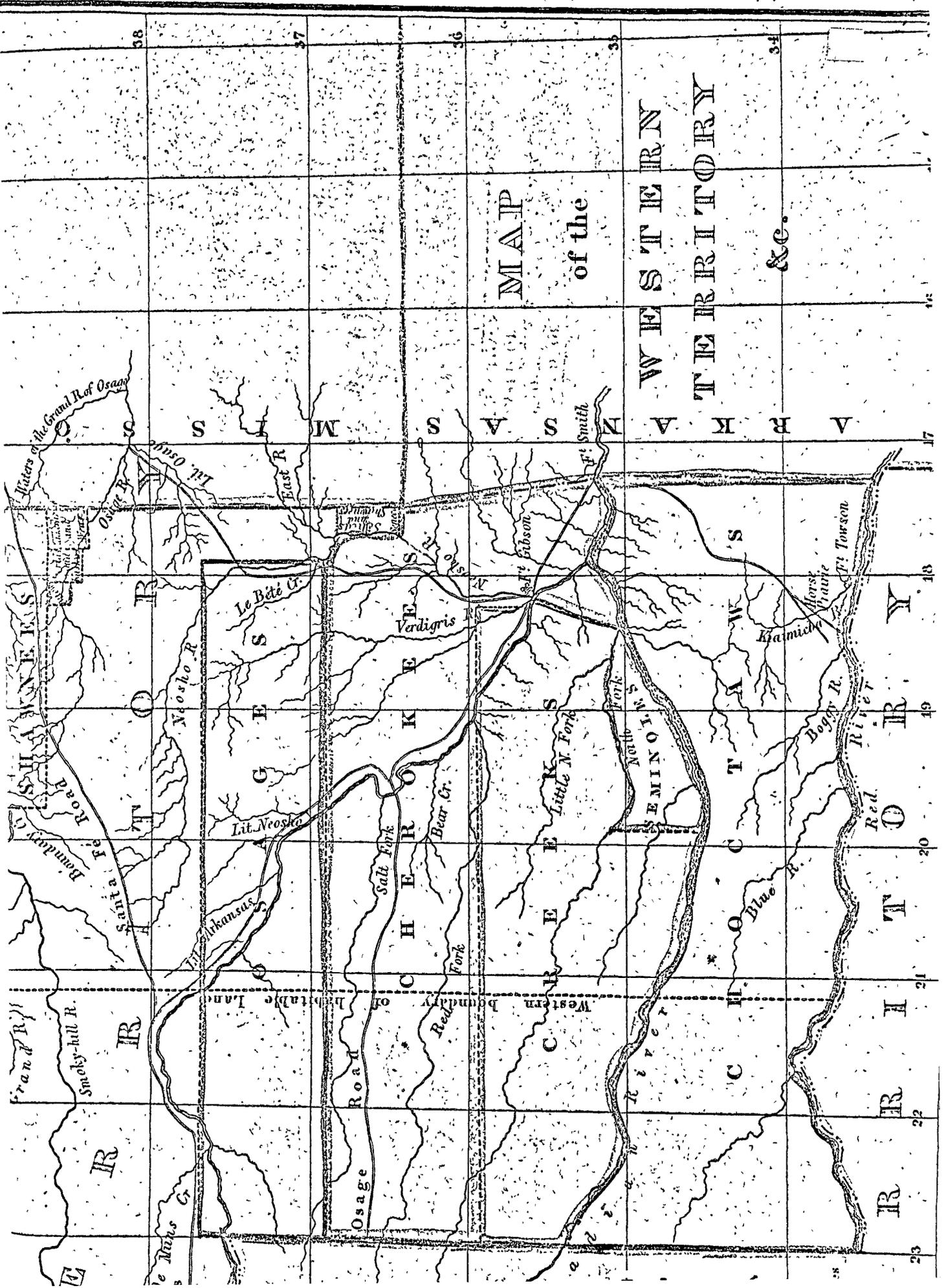
a. General- The different Indian Tribes are located west of Missouri and Arkansas. The Choctaws are situated just north of Texas on the Red River. A line of military forts protect the boundary to the United States: Fort Towson on the Red River, Fort Smith on the Canadian River, Fort Gibson on the Arkansas River, and Fort Leavenworth in the north.

b. Cross Timbers- This area is not located on this map, but it is interesting to note line which would be on or near the Cross Timbers which states, "Western Boundary of Habitable Land."

8. Comment—At the time that this map was prepared,
Texas was a part of Mexico.

MAP
of the

WESTERN
TERRITORY
&c.



1. Enclosure- Seven
2. Date- 1836
3. Title- Map of Texas
4. Author- E. F. Lee
5. Purpose- Display the latest grants and discoveries. It should be noted that the Cross Timbers is not recorded on this map. Published by J. A. James and Company, Cincinnati.

6. Authenticity or location- This document is published and included with David B. Edward's book, History of Texas or The Emigrant Farmer and Political Guide, J. A. James & Co., Cincinnati, 1836.

7. Description

- a. General- It is interesting to note that this map indicates the Nueces River as the southern boundary of Texas, but the marginal information discusses the possibility of the Rio Grande as a border. A comparison may be made between this map and Colonel Stiff's map of 1840. (See enclosure eight.)

- b. Cross Timbers- The Cross Timbers is not recorded on this map. The vast amount of other available land had not yet attracted interest to North Central Texas.

8. Comments— In general this map appears to be more accurate than the map published by George Conclin four years later, from the same city, Cincinnati. (See enclosure eight.)

1. Enclosure- Eight

2. Date- 1840

3. Title- Texas

4. Author- Published by George Conclin of Cincinnati.

5. Purpose- The purpose of this map was to indicate the extension of land grants since 1830 [see enclosure 5] and the large number of communities that had developed in this decade.

6. Authenticity or location- This document is published and recorded with Colonel Edward Stiff's book, The Texa Emigrant, 1840.

7. Description

a. General- On the original map the boundaries between the colonies is colored. For the purpose of orientation, it is pointed out that several errors exist. The longitude markers at the bottom of the map are incorrect.

b. Cross Timbers- The forest is incorrectly located in the western area of the state. The draftsman could have made the error by relating the trees to the John Cameron Grant. Since Cameron had two grants, the proper location would have been at the right edge of the grant on the Red River.

8. Comments- The general area of the feared Comanche Indians is located in the Northwest part of the State. In the North central portion are the words, "Immense Level Prairies."

This map is almost identical to that published by Rev. Chester Newell in his book, History of the Revolution in Texas, New York, 1838.



Enclosure 8.

1. Enclosure- Nine (a, b, c, & d).
2. Date- 1841
3. Title- Sketch showing the Route of the Military Road from Red River to Austin.
4. Author- Drawn by H. L. Upshur
5. Purpose- Indicate the selected route for the military road and location of Posts on this route. The Texas Congress had designated the route to be from the Kiamichi branch of the Red River to Austin. This map confirms why the new route was necessary.

6. Authenticity or location- The original copy of this map is located in the archives of The University of Texas Library.

7. Description

a. General- The original of this sketch is drawn on the skin of an animal which gives the reproduced copy a strange appearance. The size of this map has been reduced to meet the requirements of this paper.

b. Cross Timbers- This is the first recognized trip along the full length of the eastern edge of the Cross Timbers. Lt. Whiting made a trip nine years later along the western edge of the same Cross Timbers (see enclosure eighteen).

8. Comments- This document indicates Colonel Cooke's intention of heading for Fort Towson on the Kiamichi River but on reaching the Trinity River, the party turned west. About halfway to Cedar Springs, Colonel Cooke left the wagons and took a northern route through the Haw Thicket. On reaching the home of Bailey English on the Bois d'Arc River, they established a camp.

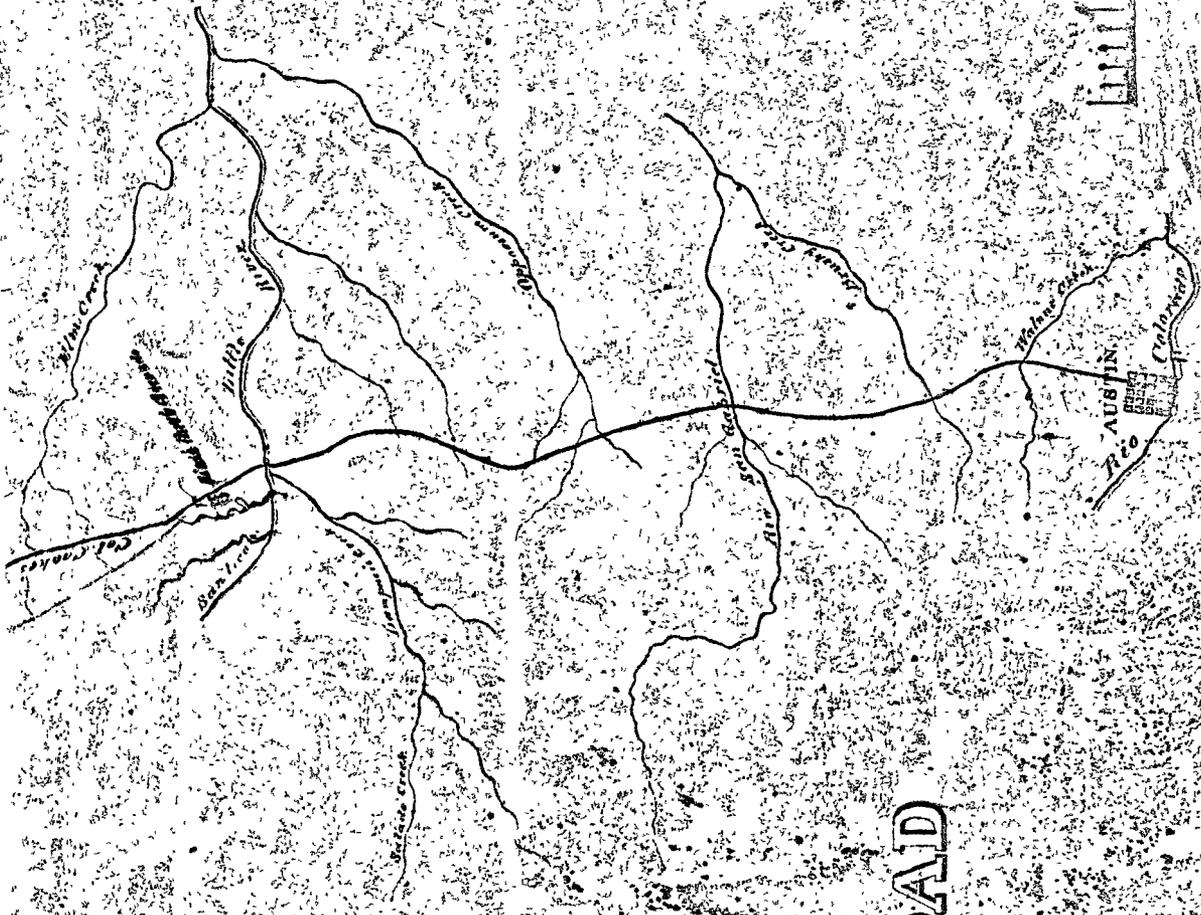
Horace Bailey Carroll referred to this map in his book, The Texan Santa Fe Trail (page 20), "With Colonel Cooke Commanding and [William] Hunt as engineer, these two men had led a reconnaissance expedition to Red River in 1840, and a proposed military road from Austin to Red River had been projected on a map drawn by H. L. Upshur, in 1841. The map as drawn is far from a perfect piece of cartography; but it does give a 'Route (to Red River) recommended by (the) Engineer' and without a doubt, the Texan Santa Fe Expedition. . . followed closely the designated recommendation upon this map."

The report made by Colonel Cooke on November 14, 1840, to Branch T. Archer, Secretary War of the Republic of Texas, describes his expedition and is attached to this enclosure (9b & 9b').

John Henry Brown in his book, History of Dallas County, Texas makes reference to the Military Road for which this map is the product. (See pages 6-9.)

Lieutenant Colonel A. Clendinen made a separate report to Colonel Hugh McLeod, the Texas Adjutant. A copy of the first page of this letter is attached (9c).

Colonel Hugh McLeod wrote two special orders to Lt. Col. Clendinen, one dated November 23, 1841, and the other dated November 25, 1841. A copy of both of these letters is attached (9d & 9d').



ROUTE



MILITARY ROAD

from Red River to Austin.

Col. W. A. Cooke

Commanding

H. H. Hunt

Adjutant

1850

W. A. COOKE
 H. H. HUNT
 ADJUTANT

Camp on Bois d'Arc
Nov. 14, 1840

Honl. B. T. Archer
Secretary of War

Sir

I joined the troops at Little River agreeably to my arrangements on the 9th of September where I remained five days waiting for the mules which were to be furnished me at that place but which were not delivered. In the mean time the beeves escaped through the neglect of the guard, the Q Master made arrangements to furnish others, but as they could not be obtained immediately, I started for the Brazos without them, where I had ordered Capt. Holliday to join me, leaving directions to have the beeves driven on as soon as possible.

I arrived at the Waco Village on the 17th where I remained until the Q Master came up with the supplies when I again took up the line of march for the Trinity making but slow progress on account of crossing the creek bottoms with our waggons.

Owing to the dryness of the season we were obliged to encamp in two or three instances without water. Upon one of these occasions at Chambers Creek, several of our men went back upon the trail for water and contrary to orders without their muskets, they were attacked by the Indians probably ten or fifteen in number, and five of them killed. Upon the same night a severe norther blew up during which our cattle again broke away from the guards and escaped, though every exertion was made to recover them they were probably driven away by the Indians who were prowling about our camp, from the Brazos to the Trinity. We averaged about six or eight per day both on account of the difficulty of getting through the bottoms and the bad condition of our mules, after the loss of our beeves we were entirely without provisions, with the exception of sugar and coffee, no corn being taken upon the expedition.

From Little River to the Brazos we found buffalo in abundance and also for several days after we left Chambers Creek, but as we approached the Trinity game became scarce and before we reached the Maine Bottom, we were obliged to subsist for several days on dogs, mules, and horses.

In this state of affairs I saw it was impossible to get to the settlements with the waggons or even with the sick, and being informed by the Pilot that it was but two days ride to the settlements on the Sulphur Fork of Red River. I concluded to leave a part of my command and march on for supplies, calculating to reach the settlements in few days. Lieut Col. Clendinen at his own request was left on the West side of the Trinity, with the waggons, sick, and forty men as a general.

The fifth day after leaving the Trinity, we struck a thicket, supposed by our guide to be the head waters of the Sabine which we were five days in cutting through, and on the 10th day after leaving Lt. Col. Clendinen we struck the trail of Chihuahua Traders which took us to the settlement on the Bois d' Arc Fork Red River, where we were received very hospitably by

Mr. Baily English and furnished with supplies after having been without beef twenty two days.

Arrangements were immediately made to send assistance to the command on the Trinity, a Company was sent back with beeves, oxen to draw the waggons &c. Four men who have returned state they arrived there on the 5th Inst but too late to meet with Col. Clendinens Command. Captains Skerrett and Hayton were there with forty men who had followed from Austin. Captains S. & H. had reached there on the 4th Inst. they stated they had found a note signed by Col. Clendinen dated the 3rd Inst stating that he had been starved out, that he had eaten the most of his mules and horses; that he was obliged to leave for the settlements and that he expected to return in 8 or 10 days.

I heard nothing of Col. Clendinen but expect he has gone down the Trinity. He had when I left him about 20 horses and mules.

Upon the arrival of Capt. Skerrett with his command, I shall proceed to obey my orders. Reporting the military road, the soldiers here are in fine health and condition. I have selected a fine situation, for the Post on Red River, 11 miles above Coffee's Station where supplies can be easily obtained, and where it will afford the most protection against the Indians.

I am told by Mr. Coffee that he with many of the settlers were about to leave, but that our arrival has altered their determination. The papers muster rolls &c are at the Trinity which will prevent the proper return being made to the Department.

I am respectfully yr Obt Servt.

Wm. G. Cooke,
Col. Comdg 1st Infnty.

A true copy from the original.)
R Cosby Todd)
Asst Clk. Insp. Genls. office)

Army Papers. Texas State Archives.

Stoucks plantation Nov 18

Col Hugh McLeod

Major & Inspector Genl

Sir

I have the disagreeable intelligence to communicate to you of the interruption of our operations in running the Military road, in consequence of a total want of provisions and our provisions being taken down Col Cooke marched with the majority of the command from this side of the river towards the sulphur fork of the river leaving me with the baggage and a guard of forty men instructing that supplies would be sent to me in six or at most ten days I was then to march with the balance of the command towards Red River Col Cooke marched down the camp on the river on the 11th of October and I remained until the 3rd of November when I marched my command to the Falls of the ~~river~~ ~~Admiral~~ ~~King~~ here we arrived on the 16th finding being compelled us to cut up nearly all our provisions horses and mules when I found I was compelled to leave the Trinity I attempted to cross the river at several places it impossible to get through the bottom in consequence of high water left the tents standing and baggage

Adjutant & Inspr. Genl. Office
Quarters Nov. 23 1840

Special order
No. 389



St. Col. A. C. C. C. C.
Comd. Detachment 1st Regt

Sir

Lieut. Radcliffe is ordered
to proceed forthwith to report to you, with
No. Master & Commissary Stores, on his arrival
You will take up the line of March with
your effective force, leaving a Commissary
officer in charge of the sick, and your
Sgt. Cooke, should you not come up to
him before you reach the Trinity, you
will occupy the Camp abandoned by
him there, and await his arrival -
when you will report to him

By order of
The Secretary of War

M. W. Lead
Adjutant & Inspr. Genl.

Adjutant & Inspt Genl Office
Austin Nov. 25th 1840

Special Order
No. 348

Lieut Col. A. Clendenen
1st Infantry Comd. Black Mt
Camp Cherokee

Sir
A report having reached the
Dept thro' the Seminary Indians, now encamped
on the waters of the Brazos, that a large
body of hostile Indians are encamped on the
Upper Brazos, anticipating a descent upon the
settlements of that river. You will forthwith
call upon Placedo the Chief for twelve of
his best warriors, as spies to conduct the
troops to where the hostile Indians are encamped
with them you will report to Col. Sp. & Comd
Genl 1st Infantry, who is ordered to attack &
if possible destroy them

A. W. Lewis
Adjutant & Inspt Genl

By order of
The Secy of War

1. Enclosure- Ten (a & b).
2. Date- 17 April 1841
3. Title- Map of Texas
4. Author- John Arrowsmith
5. Purpose- Compiled from Surveys recorded in the Land Office of Texas and other Official Surveys.

6. Authenticity or location- This map is included in the publication by William Kennedy, Texas: The Rise, Progress, and Prospects of the Republic of Texas (Reprint from Second edition, London, 1831). The Molyneaux Craftsmen, Inc., Fort Worth, Texas, 1925. The proper Texas seal is placed on the map.

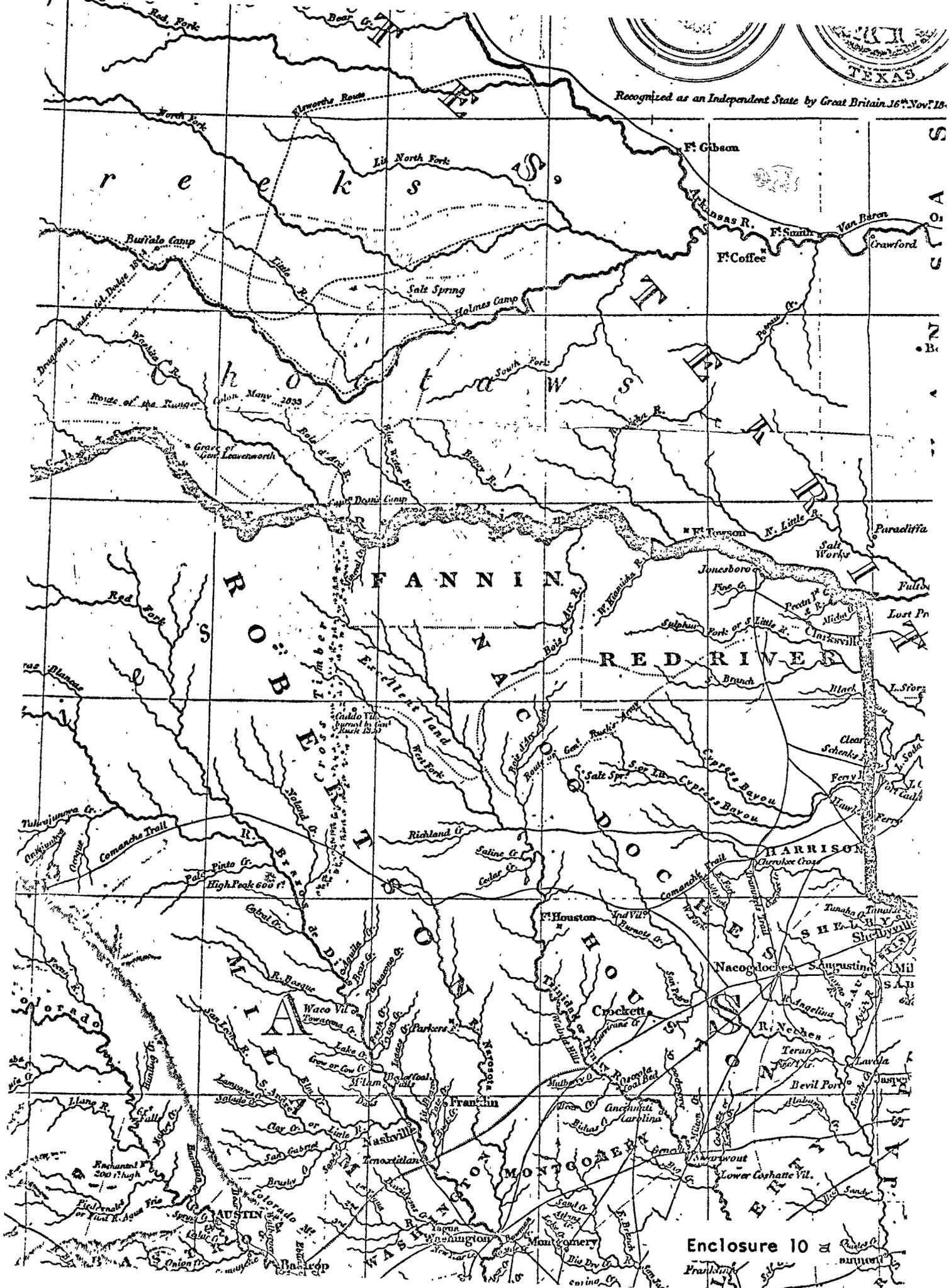
7. Description

a. General- A large amount of detail is shown on this map. Land divisions are designated on the eastern edge of Texas.

b. Cross Timbers- On this map the Cross Timbers is properly located by symbols of trees placed near and parallel to the 97th degree meridian. The trees extend from where Nolan Creek flows into the Brazos River, north to the Red River. On page 97 of the book, Kennedy has the following to say: "The Cross Timbers of Northern Texas, which may be deemed one of the natural curiosities of the

country, forms a remarkable feature in its topography." Then he adds, "The following description of it is founded upon information furnished by respectable persons who have resided for several years in its vicinity, have visited nearly every portion of the adjoining districts, and examined it throughout its whole extent." On page 98 Kennedy writes a description, "The Cross Timbers is a continuous series of forests, extending from the woody region at the sources of the Trinity, in a direct line north, across the apparently interminable prairies of northern Texas."

8. Comments- Near the Cross Timbers the Caddo Indian village is located where General Thomas J. Rusk burned out the remains in 1839. This is near the military post located on Cedar Springs by Colonel Cooke in 1840 (see enclosure 9.), then became the Kentucky Settlement and later the City of Dallas.



Recognized as an Independent State by Great Britain 16th Nov 1836

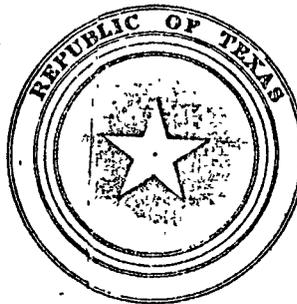


Enclosure 10

MAP OF TEXAS,

compiled from
Surveys recorded in the Land Office of Texas,
and other Official Surveys,

JOHN ARROWSMITH,
250 Square, London.



Recognized as an Independent State by Great Britain, 16th Nov. 1840.



Enclosure 10 b

1. Enclosure- Eleven
2. Date- 1842?
3. Title- [Texas]
4. Author- Thomas Gamaliel Bradford
5. Purpose- This map indicates some of the initial counties which were designated.

6. Authenticity or location- This is located in The University of Texas Archives.

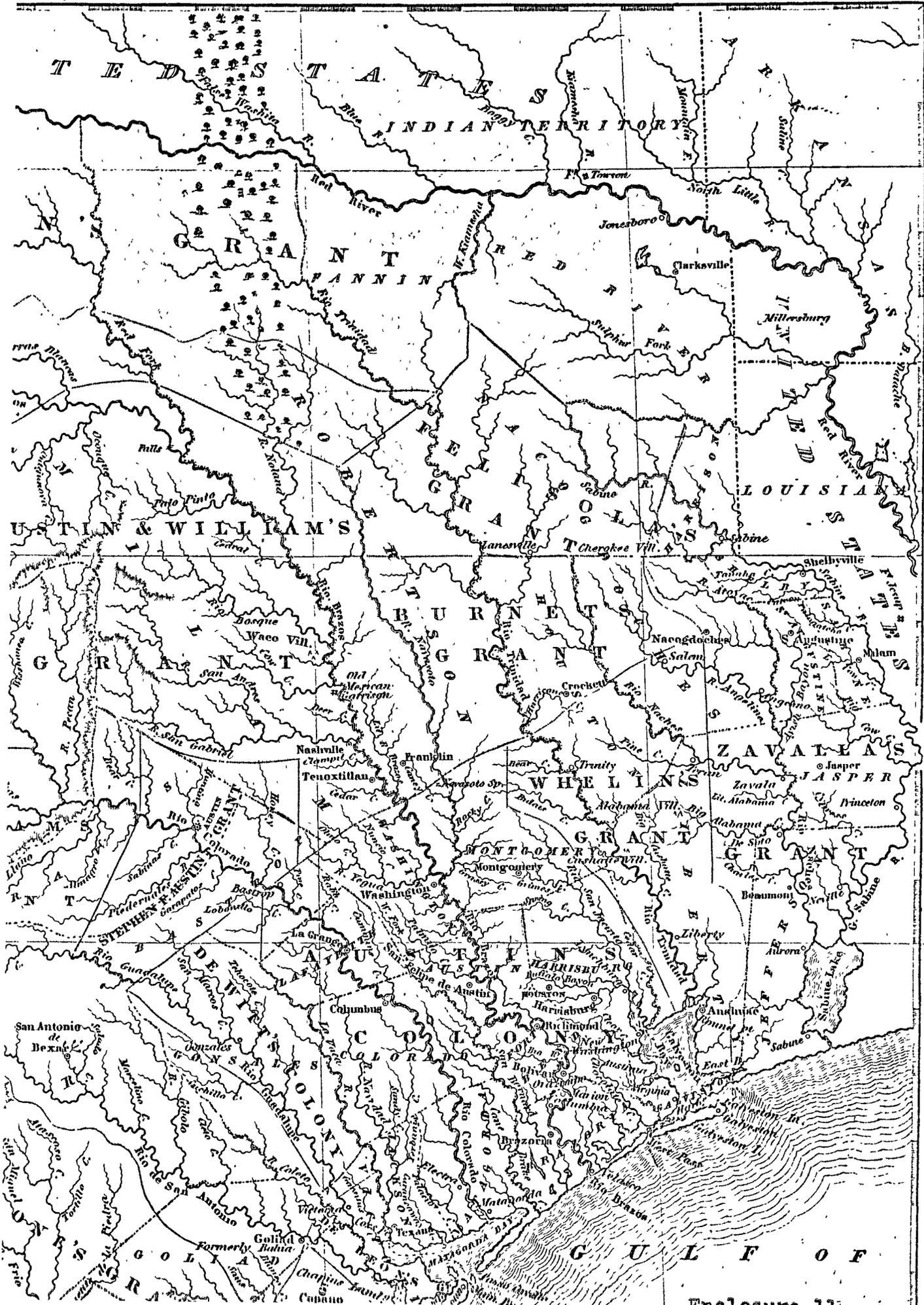
7. Description

a. General- The map is a section of a larger map which shows the Cross Timbers. It may be noticed that several of the original Land Grants are subdivided into proposed counties. Fannin County is located on the eastern edge of the Cross Timbers.

b. Cross Timbers- The Cross Timbers is symbolized by individual trees properly located in north central Texas. It is interesting to compare these symbols (generally considered as only approximate) with the more accurate map by Charles S. Sargent. [See enclosure 25.] On both maps the Cross Timbers extend down to, but do not touch the Brazos River.

8. Comments- This undated map was prepared by Bradford from Massachusetts, who entered Texas in 1838. The

estimated date is based on the location of the county of
Millersburg, north of Louisiana.



34

32

30

1. Enclosure- Twelve
2. Date- 1844
3. Title- Map of Texas and the Country Adjacent
4. Author- 1st Lieutenant W. H. Emory, T.E.
5. Purpose- Compiled in the Bureau of the Corps of Topographical Engineers from the best Authorities, for the State Department, under the direction of Colonel J. J. Abert, Chief of the Corps.

6. Authenticity or location- This map is properly authenticated and filed at The University of Texas Archives.

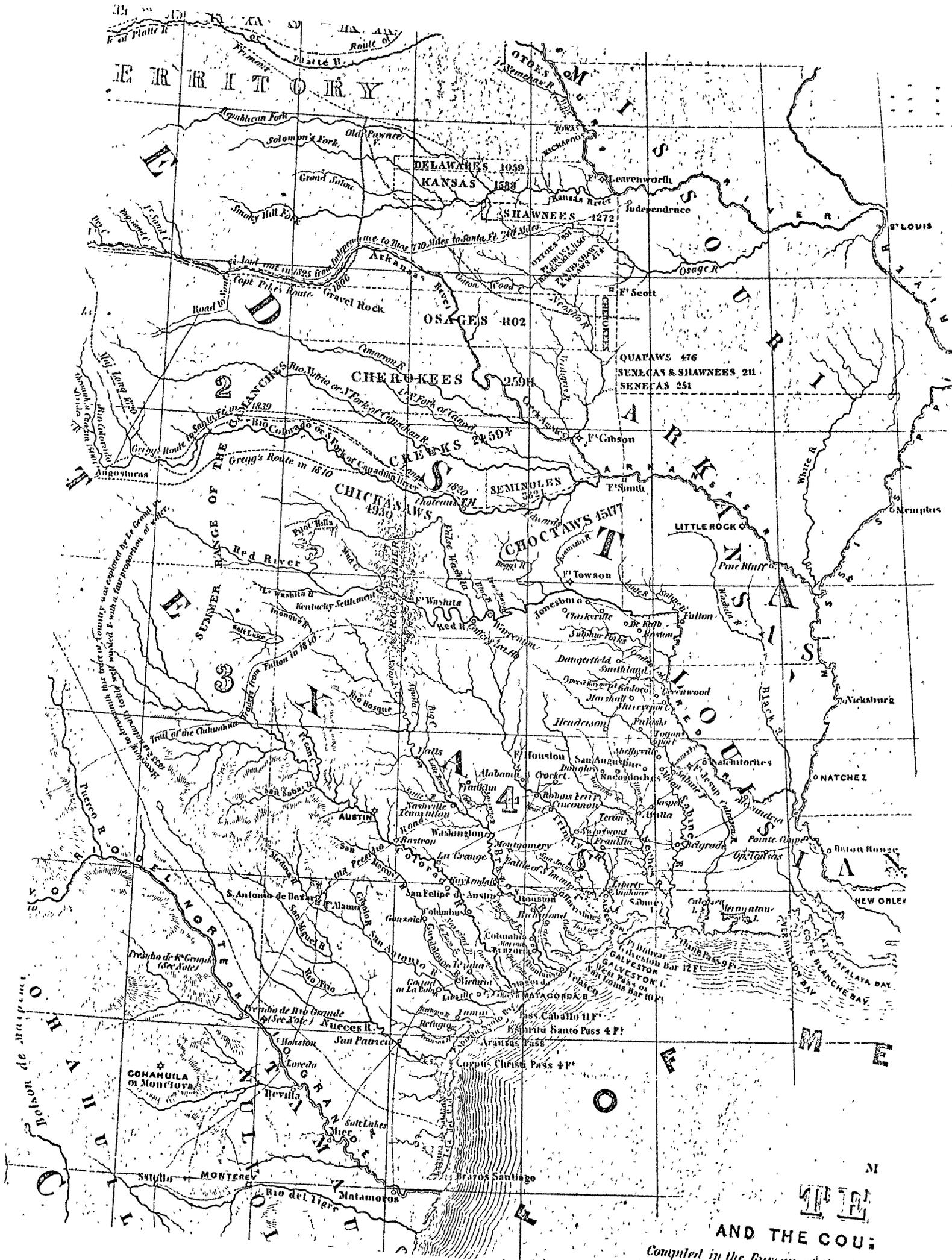
7. Description

- a. General- Lt. Emory has located several different Indian tribes on this map, and he has given the estimated population. Several interesting routes are indicated near the Cross Timbers, such as Major Long's route in 1820, Gregg's route to Santa Fe in 1839, and the Trail through the Cross Timbers of the Chihuahua traders from Fulton in 1840. It should be noted that the Chickasaw Indians now own the western part of the Choctaw land (see enclosure 6). The Cross Timbers almost forms a boundary between these two tribes.

- b. Cross Timbers- Located in the center of this portion of the map, extending from the Brazos River to the

Canadian River. It should be noted that the Kentucky Settlement is situated on the Red River, west of the Cross Timbers and opposite Fort Washita.

8. Comments- In the Great Plains region it is noted "According to Arrowsmith this tract of country was explored by Le Grand in 1833 & is naturally fertile, well wooded & with a fair portion of water." Also another remark, "Summer Range of the Comanches." On the east side of the Cross Timbers Coffee's Trading House is located on the Red River. One should notice the large number of communities in East Texas and along the Gulf of Mexico.



This territory was explored by Le Comte in 1804 with his expedition & with a few propositions of water.

THE
AND THE COU

Compiled in the Bureau of the Corp
 Enclosure 12
 the box



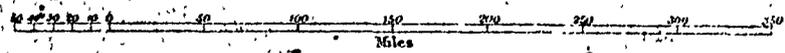
MAP OF
TEXAS

AND THE COUNTRY ADJACENT.

*Compiled in the Bureau of the Corps of Topographical Engineers, from
the best Authorities.*

FOR THE STATE DEPARTMENT,
Under the direction of Colonel J.J. Abert Chief of the Corps,
by W. H. Emory, 1st Lieut. T. E.

WAR DEPARTMENT
1844.



1. Enclosure- Thirteen
2. Date- 1844 (Expedition was made in 1841-42).
3. Title- Texas and Part of Mexico & the United States showing the Route of the First Santa Fe Expedition.
4. Author- Published by D. Bogue, drawn by W. Kemble and engineered by N. York.
5. Purpose- To orient the readers on the area.
6. Authenticity or location- This map is located in the book by George Wilkins Kendall, Narrative of the Texan Santa Fe Expedition, Harper, New York, I, & Wiley and Putnam, London, 1844.
7. Description
 - a. General- This map contains some errors but it does serve to show the route taken through the Cross Timbers.
 - b. Cross Timbers- The area is designated as a single strip of trees like the map of 1844 [see enclosure 12] and the map of 1846 [see enclosure 14]. The Pike trip through the Cross Timbers is questionable. Other data showed his route farther south. The Santa Fe route on this map may be compared with the proposed route shown on the sketch of the military road [see enclosure 9].
8. Comments- At the south end of the Cross Timbers it was recorded that herds of buffalo were present. Like the

Emory map [see enclosure 12], Mr. Gregg's route from Van Buren (near Fort Smith) to Santa Fe in 1839 was located along the Canadian River.

1. Enclosure- Fourteen
2. Date- 1846
3. Title- Map of Texas and Part of Mexico
4. Author- Published by Topographer E. H. Ensign
of New York.
5. Purpose- Reduced and compiled from the Congressional map and other recent authorities. Entered according to Act of Congress in the year 1846, by A. Willard in the Clerk's Office in the District Court of the Southern District, N.Y.
6. Authenticity or location- This map is properly authenticated and filed at The University of Texas Archives.
7. Description
 - a. General- This map generally substantiates the Emory map [see enclosure 12]. Inasmuch as it is two years older, the populations of the Indian tribes have changed.
 - b. Cross Timbers- This area is fixed as a large area in the center of the map and projecting north from the Brazos River on the 98th degree longitude, which is about the same as the Emory map.
8. Comment- On this map a larger area is presented which represents the Cross Timbers. This is much the same as the Disturnell map of 1846, published in New York.



**MAP
OF
TEXAS
AND PART OF
Mexico**

Reduced and compiled from
the Congressional map and
other recent authorities
1846.

PUBLISHED BY T. A. H. R. S. & C. O.

Scale in Miles

Entered according to Act of Congress in the year 1846 by T. A. H. R. S. & C. O. in the District Court of the Southern District of New York.

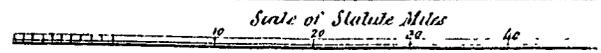
1. Enclosure- Fifteen (a & b).
2. Date- 1849
3. Title- Part of North Eastern Texas, Shewing
[sic] the Route of the Inspectors.
4. Author- Unknown (Printed by R. B. Moody).
5. Purpose- To indicate the routes taken by the
British inspecting party.
6. Authenticity or location- This document is one of
the two maps located in Edward Smith's book, Account of a
Journey through North Eastern Texas Undertaken in 1839,
Hamilton, Adams and Company, London, 1849.
7. Description
 - a. General- This is an excellent descriptive map
of North East Texas. A large amount of detail is given to
rivers and their small branches.
 - b. Cross Timbers- The Cross Timbers is indicated
on the western edge of the map and extends from Dallas
County north through Denton and Grayson counties. The
city of Dallas is shown on the eastern edge of the Cross
Timbers.
8. Comments- The county lines of the designated coun-
ties are defined. The route taken by the Englishmen and
other roads are shown.

In the book by Edward Smith a point was made about the English family at Bonham. Judge English, age 58, said his "grandparents emigrated from England, and his father settled in Texas in 1816, being one of the first pioneers. He came with his father and was brought up as a backwoodsman and never left the neighbourhood of his first location." (Page 133.)

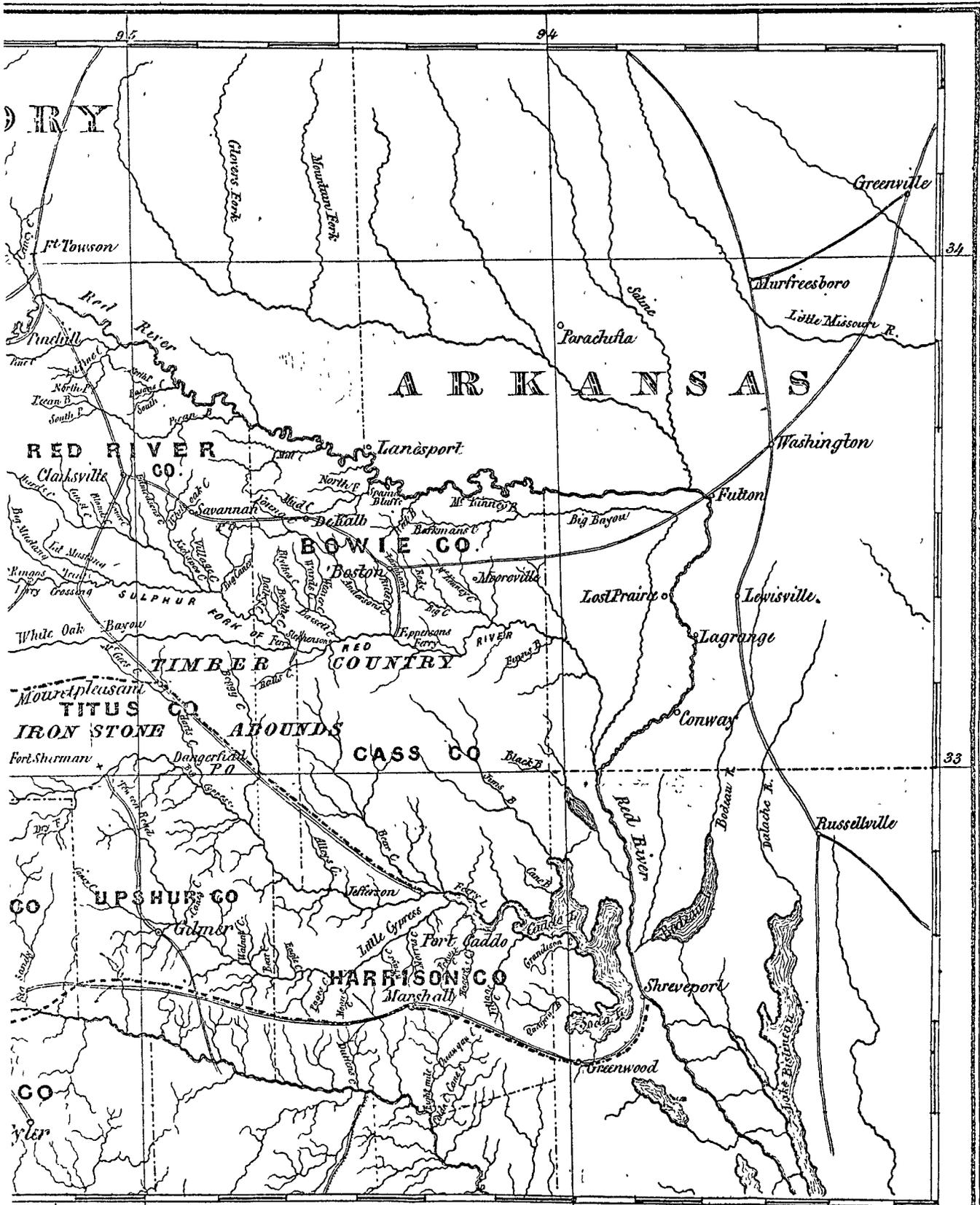
PART OF NORTH EASTERN TEXAS, SETTING OFF THE



Leedy & Co. Lith 12, Cannon St. Burn



SHOWING THE ROUTE OF THE INSPECTORS



1/4 Statute Miles
 20 40 60

1. Enclosure- Sixteen (a, b, & c).
2. Date- 1849
3. Title- Map of Texas
4. Author- Unknown (printed by R. B. Moody)
5. Purpose- To orient the reader of the book.
6. Authenticity or location- This document is one of the two maps located in Edward Smith's book, Account of a Journey through North Eastern Texas Undertaken in 1849, Hamilton, Adams and Co., London, 1849.

7. Description

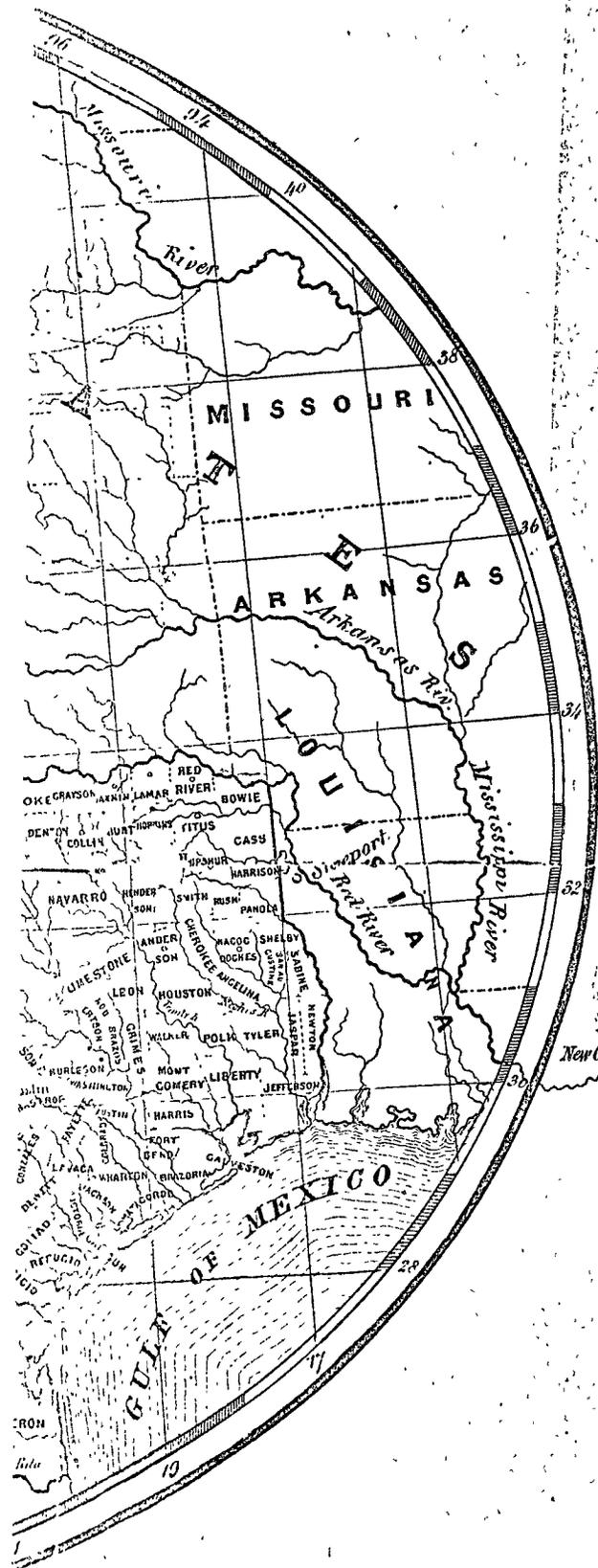
a. General- The marginal information contains the land districts, counties and county towns. It is interesting to note that land areas are beginning to become organized. The movement of organization starts in the east and extends across Texas.

b. Cross Timbers- The Cross Timbers is indicated by a single group of trees west of Cooke County. It appears that this information is from reports and not surveyed data..

8. Comments- While this map and the map by Jacob De Cordova, see enclosure 17, were published during the same year (but in different countries) there is an amazing comparison between the two. Both maps are of the same scale

and major geographical features such as rivers take exactly the same course and have the same length. Also the counties are of the same size and shape as if both maps had been printed from the same plates. However, the De Cordova map contains more details.

(This map is presented in three parts to insure authenticity.)



LAND DISTRICTS	COUNTIES	COUNTY TOWNS
Lamar	Lamar	Paris
	Hopkins N. part of	Tarrant
	Liberty	Liberty
Liberty	Folk	Livingstone
	Tyler	Woodville
Matagorda	Matagorda E part of	Matagorda
	Wharton S. E part of	Wharton
Madam	Madam	Cameron
	Burleson	Coldwell
	Williamson	Georgetown
Montgomery	Montgomery	Montgomery
	Walker	Huntsville
	Grimes	Anderson
	Nacogdoches	Nacogdoches
	Angelina	Marion
	Cherokee	Rusk
	Smith	Tyler
	Upshur W. part of	Gilmer
Nacogdoches	Van Landt N. part of	Jordans Saline
	Henderson N part of	Buffalo
	Kaufman	Kaufman
	Dallas E part of	Dallas
	Hunt S part of	Greenville
	Hopkins S part of	Tarrant
Red River	Red River	Clarksville
	Titus W. part of	Mount Pleasant
	Robertson	Franklin
	Leon	Leona
Robertson	Limestone	Springfield
	Navarro	Corsicana
	Dallas	Dallas
	Rusk	Henderson
Rusk	Panola W. part of	Carthage
Sabine	Sabine	Milham
San Augustine	San Augustine	San Augustine
Shelby	Shelby	Shelbyville
	San patricio	San patricio
San patricio	Nueces	Corpus Christi
& Nueces	Cameron	Santa Rita
	Starr	Rio Grande
	Webb below Laredo road	Laredo
Travis	Travis	Austin City
	Huys	San Marco
	Comal N.E part of	New Braunfels
	Victoria E of Coletto Cr	Victoria
	Calhoun W of Lavaca Bay	Port Lavaca
Victoria	Jackson W part of	Texana
	Dewitt S.E part of	Cuero
	La Vaca S. part of	Pedersburg
Washington	Washington	Brenham

Composed of

R. B. Meacham & Co. Lith. Cannon St. Birm.

D
ICTS

COUNTIES

COUNTY TOWNS

Composed of

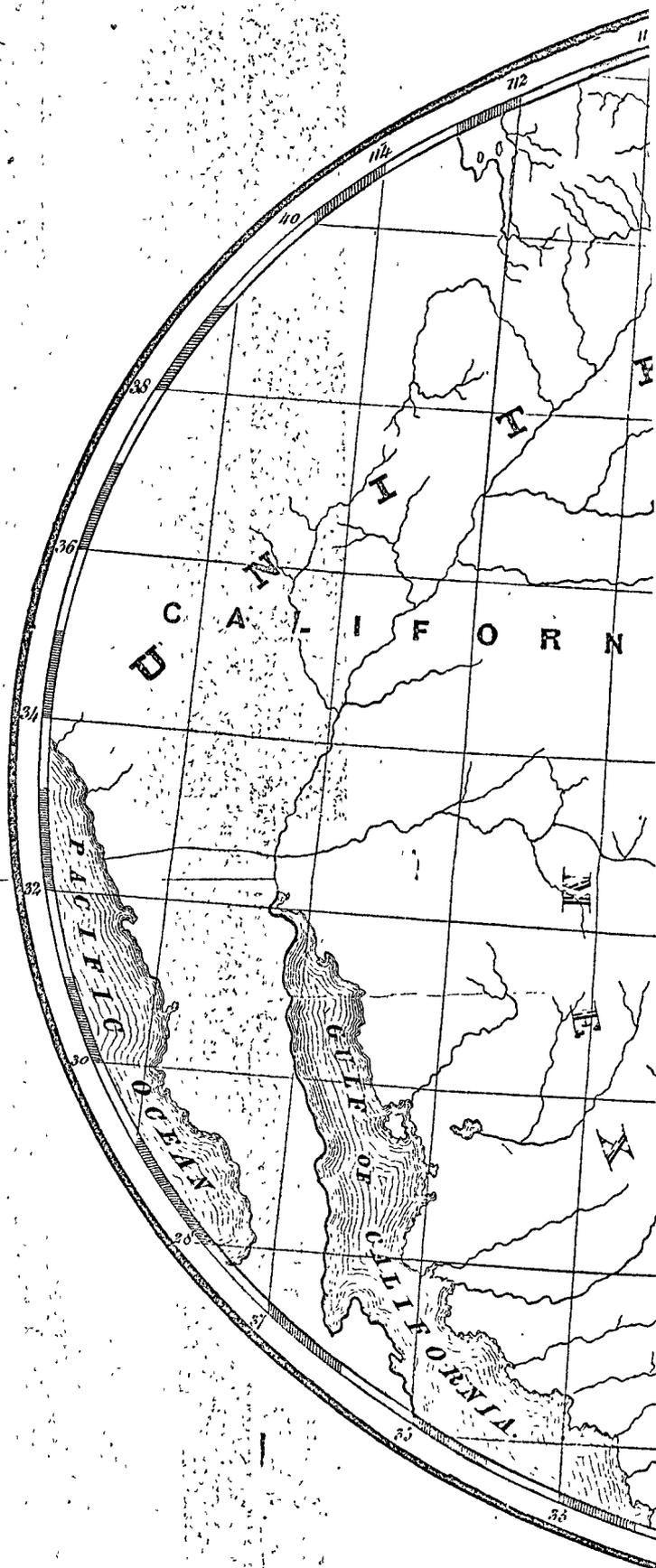
Composed of

Austin
Bastrop
Bezar- Santa Fe
Medina
Gillespie
Comal Sth West part of
Guadalupe S W part of
Webb above Laredo Road
Bowie
Cass
Texas East part of
Brazoria
Brazos
Colorado
Lavaca N.E part of
Wharton N. part of
Fannin
Hunt N part of
Grayson
Collin
Denton
Cooke
Territory W of Cooke C^y
Fayette
La Vaca part of
Fort Bend
Galveston
Goliad
De Witt W part of
Gonzales
Caldwell
De Witt N. part of
La Vaca N.W. part of
Guadalupe N E part of
Harris
Houston
Anderson
Henderson S. part of
Van Landt S. part
Harrison
Upshur E. part of
Panola E. part of
Jackson E. part of
Calhoun E. of Lavaca Bay
Madagorda W part of
Wharton S.W. part of
La Vaca part of
Jasper
Newton
Jefferson

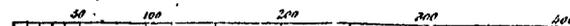
Bellville
Bastrop
San Antonio
Castroville
Fredericksburg
New Braunsfels
Sequin
Laredo
Boston
Jefferson
Mount Pleasant
Brazoria

Columbus
Petersburg
Wharton
Bonham
Greenville
Sherman
M^c Kinney
Atton

La Grange
Petersburg
Richmond
Galveston
Goliad
Cura
Gonzales
Lockhart
Cuero
Petersburg
Sequin
Houston
Crockett
Palastine
Buffalo
Jordans Saline
Marshall
Gilmer
Carthage
Texana
Port Lavaca
Matagorda
Wharton
Petersburg
Jasper
Burkeville
Beaumont



Scale of Statute Miles



1. Enclosure- Seventeen
2. Date- 1849
3. Title- J. De Cordova's Map of the State of Texas [insert to the map of Texas].
4. Author- Jacob De Cordova
5. Purpose- To accompany De Cordova's book entitled Texas: Her Resources and Her Public Men.

6. Authenticity- Compiled from the records of the General Land Office of the State by Robert Creuzbaur, Houston, in 1849. Proper testimonials to authenticate the map are located on page 29 of the above-mentioned book. These documents included statements from the various government officials of the state including President Sam Houston. A copy of this map was located in The University of Texas Archives, Barker History Center.

7. Description

a. General- The counties are designated right up to the edge of the Cross Timbers; in fact, two counties, Denton and Cooke, are located within the Cross Timbers.

b. Cross Timbers- This area is designated by symbols of trees and has not specific location. However, we may find two areas or strips of trees. Captain Marcy used the information south of his road from this map [see enclosure 19].

8. Comments- This map is the insert of a larger map. The outer circle of this map corresponds with that of the map printed by Moody [see enclosure 16].

Compiled from the records of the
General Land Office of the State by

ROBERT CREUZBAUR,

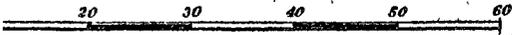
HOUSTON.

1849.

74

Printed by J.M. Atwood, New York.

SCALE OF STATUTE MILES.



Without my signature all copies of this map have
been fraudulently obtained

J. M. Atwood



28

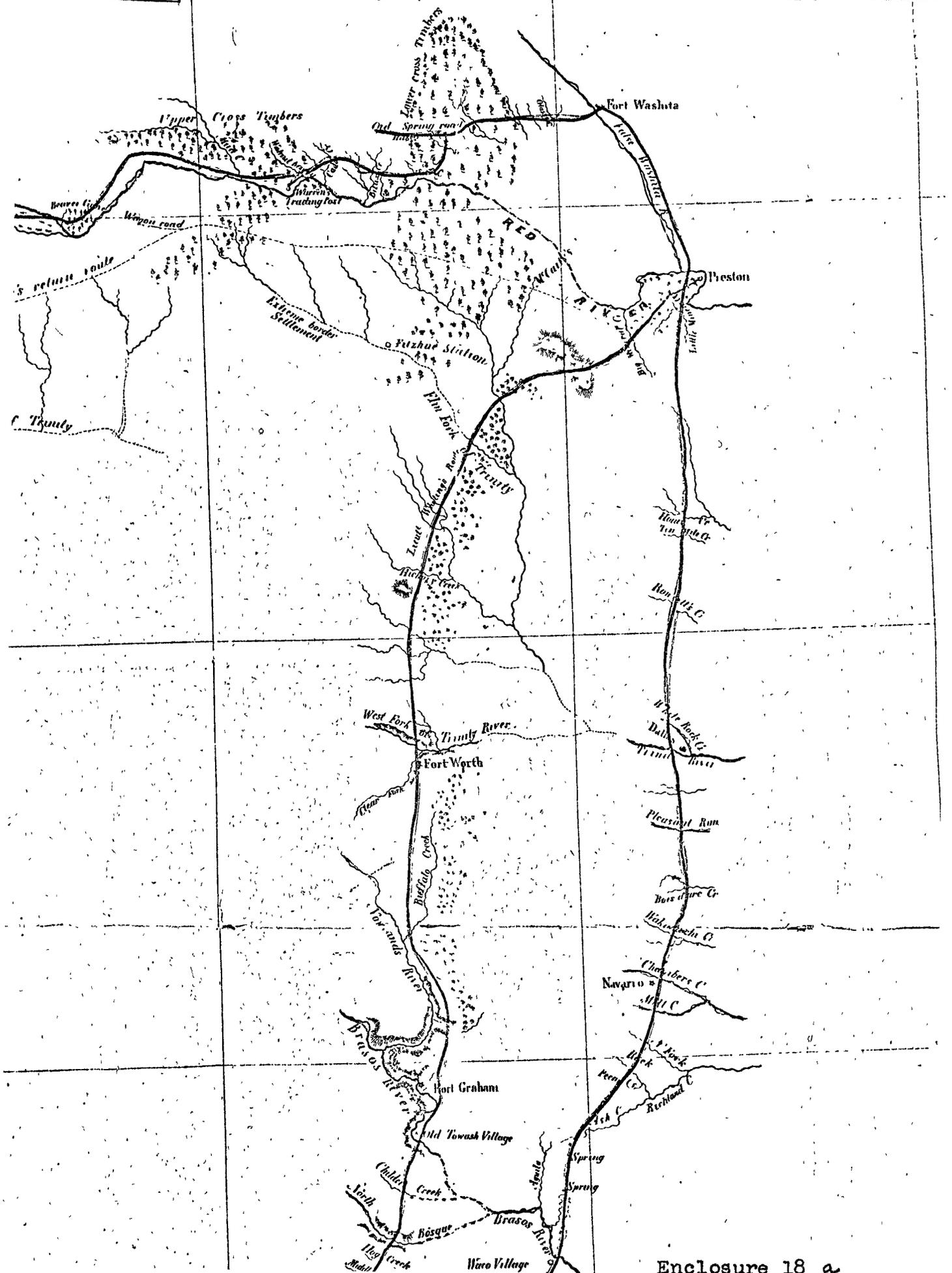
27

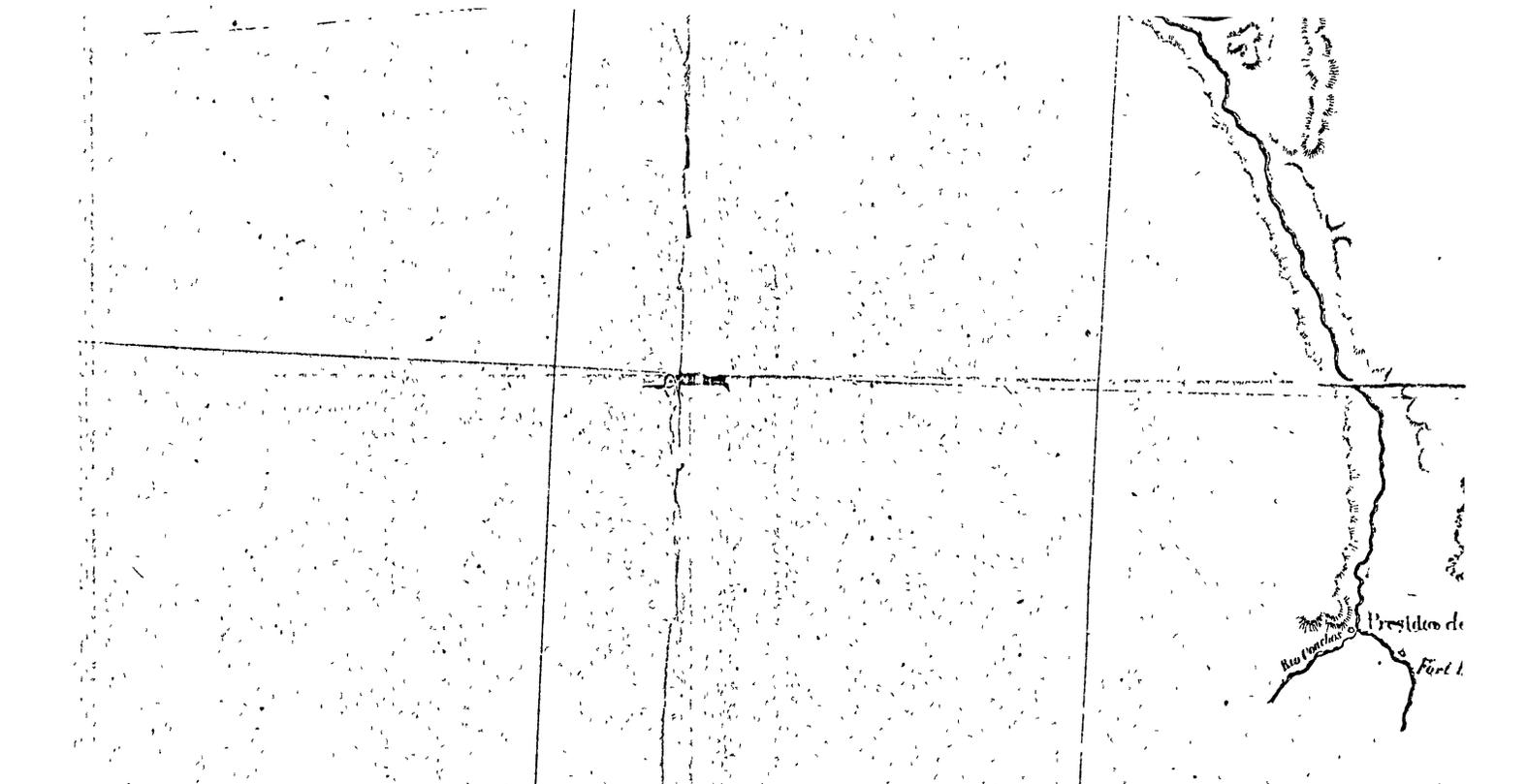
26

1. Enclosure- Eighteen (a & b).
2. Date- 1849
3. Title- Reconnoissances of Routes from San Antonio, De Bexar, El Paso Del Norte, &c &c.
4. Author- Bvt. Lt. Col. J. E. Johnston, T. Engineers.
5. Purpose- The reconnaissances were made to establish wagon roads from one community to another and to inspect the different military installations.
6. Authenticity or location- This map is attached to the Senate Executive Document Number 64, 31st Congress, 1st Session. "Report of the Secretary of War." Included on this map is the reconnaissance by Lieutenant W. H. C. Whiting, United States Engineers, 1849.
7. Description
 - a. General- The section indicated is only a portion of the large map, which covers the routes of several officers. Lt. Whiting traveled north from San Antonio and visited the several different military installations on his way to Fort Washita. He followed some already established roads that bordered on the edge of the Lower Cross Timbers.
 - b. Cross Timbers- Once again the Cross Timbers is symbolized, but is located along Whiting's route. Therefore, there is little reason to doubt this data. On the

top of the map both of the Cross Timbers areas are indicated.

8. Comment- This official information is at variance with one of the maps that accompanies William H. Goetzmann's book, Army Exploration in the American West (see enclosure 30).





RECONNOISSANCES

OF ROUTES

from

SAN ANTONIO DE BEXAR

EL PASO DEL NORTE,

&c. &c.

by

Bvt. Lt. Col. J. E. Johnston, T. Eng^r

Lt. W. F. Smith,

Lt. F. T. Bryan,

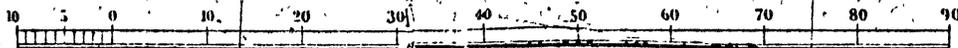
Lt. N. H. Michler,

1849.

Including the Reconnoissance of

Lt. W. H. C. Whiting, U. S. Eng^r

1849.



Scale of Miles.

1. Enclosure- Nineteen (a & b)
2. Date- 1850
3. Title- Topographical Map of the Road from Fort Smith, Arkansas to Santa Fe, New Mexico, and from Dona Ana, New Mexico, to Fort Smith
4. Author- Captain R. B. Marcy, 5th U.S. Infantry
5. Purpose- This is a map of a proposed road made by Capt. Marcy in 1849.
6. Authenticity or location- It is attached to House of Representatives Executive Document, Number 45, 31st Congress, 1st Session, "Route from Fort Smith to Santa Fe," dated February 21, 1850.
7. Description
 - a. General- This is only a section of a larger map. Each camp and the date of the camp is recorded along Marcy's trail. The descriptive data may be located in the daily journal recorded in the basic document.
 - b. Cross Timbers- The Cross Timbers are not accurately displayed on the map. They are indicated by four different strips that blend into two strips, and are shaped like two large "S's." Information contained in the margin reveals, "The Geography of that portion of Texas lying south of the Road was taken from J. De Cordova's Map of Texas." [See enclosure 1.]

8. Comments- Capt. Marcy was not sure of the area south of the road on his map. It might be added that Marcy never made a trip down the Cross Timbers; he passed through the area each time.

Captain Marcy commented on the Disturnell map of Mexico, &c. He states that it is upon this map that the boundary between the United States and Mexico is by the treated defined.¹ He adds that this map "is one of the most inaccurate of all those I have seen, so far as relates to the country over which I have passed."² Therefore, Marcy considered this document in his travels through the Cross Timbers.

An inspection of the Disturnell map indicates that it is printed in New York but in Spanish language mixed with English. The Cross Timbers is located in north central Texas, extending from the Brazos to the Red River. It is represented by a single strip of trees but is much wider than on most maps. Here the Cross Timbers is fifty miles wide and over 200 miles long and tapered at both ends.³

¹House of Representatives, Executive Document No. 45, 31st Cong., 1st Sess., Feb. 21, 1850, p. 78.

²Ibid.

³J. Disturnell (Pub.), Mapa de Los Estados Unidos de Mejico, 1846 (M.S. Negative, Latin American Collection, University of Texas Library).

TOPOGRAPHICAL MAP

OF THE

ROAD FROM FORT SMITH, Ark. to SANTA FE, N.M.

AND FROM

DONA ANA N.M., to FORT SMITH.

Made by order of Bvt. Brig Genl M. ARBUCKLE, U.S.A.

BY

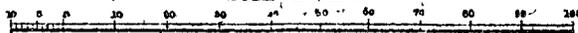
Capt. R. B. MARCY, 5th U.S. Inf.

NOTES:

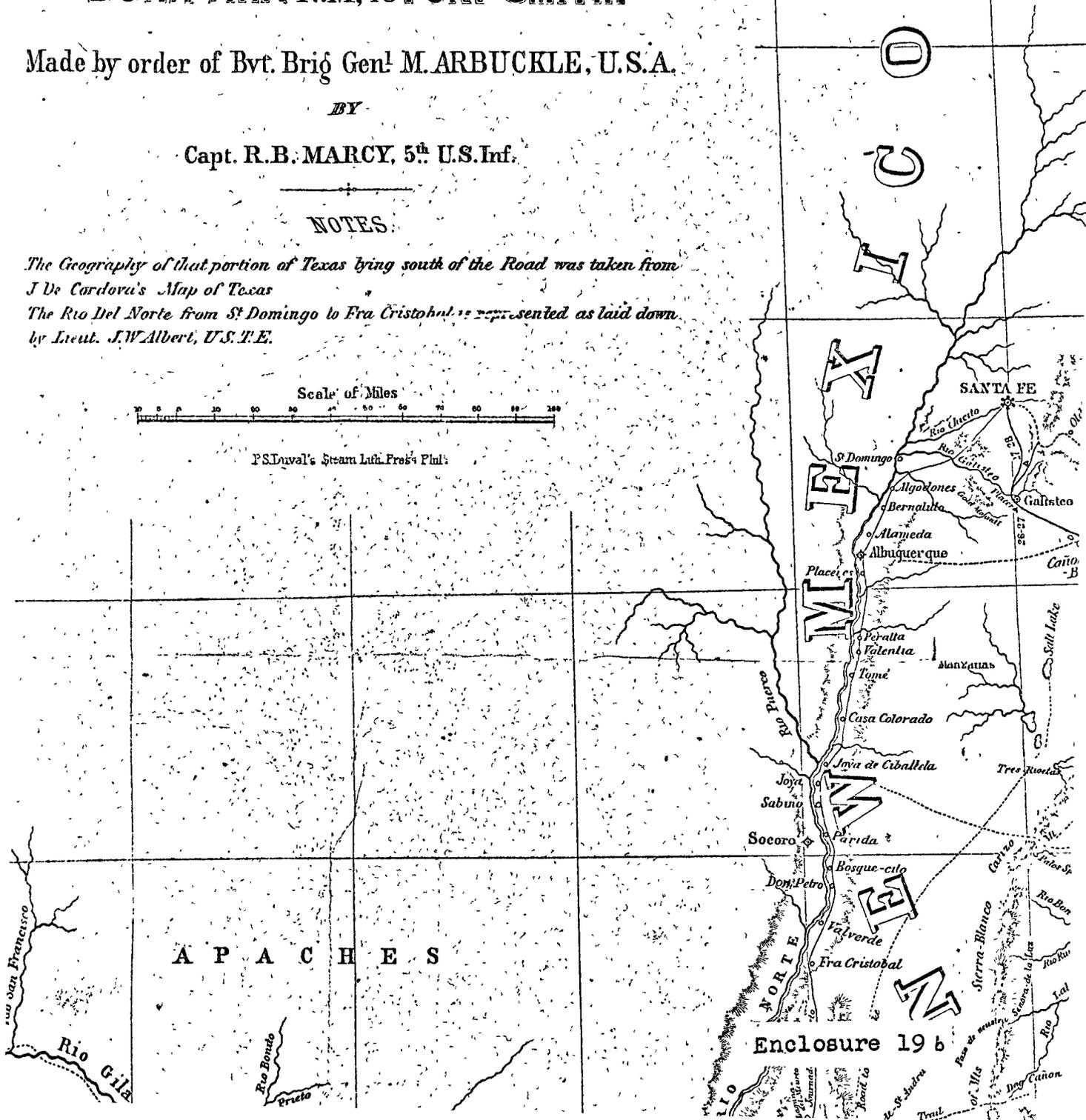
The Geography of that portion of Texas lying south of the Road was taken from J De Cordova's Map of Texas

The Rio Del Norte from St Domingo to Fra Cristobal is represented as laid down by Lieut. J.W. Albert, U.S. T.E.

Scale of Miles

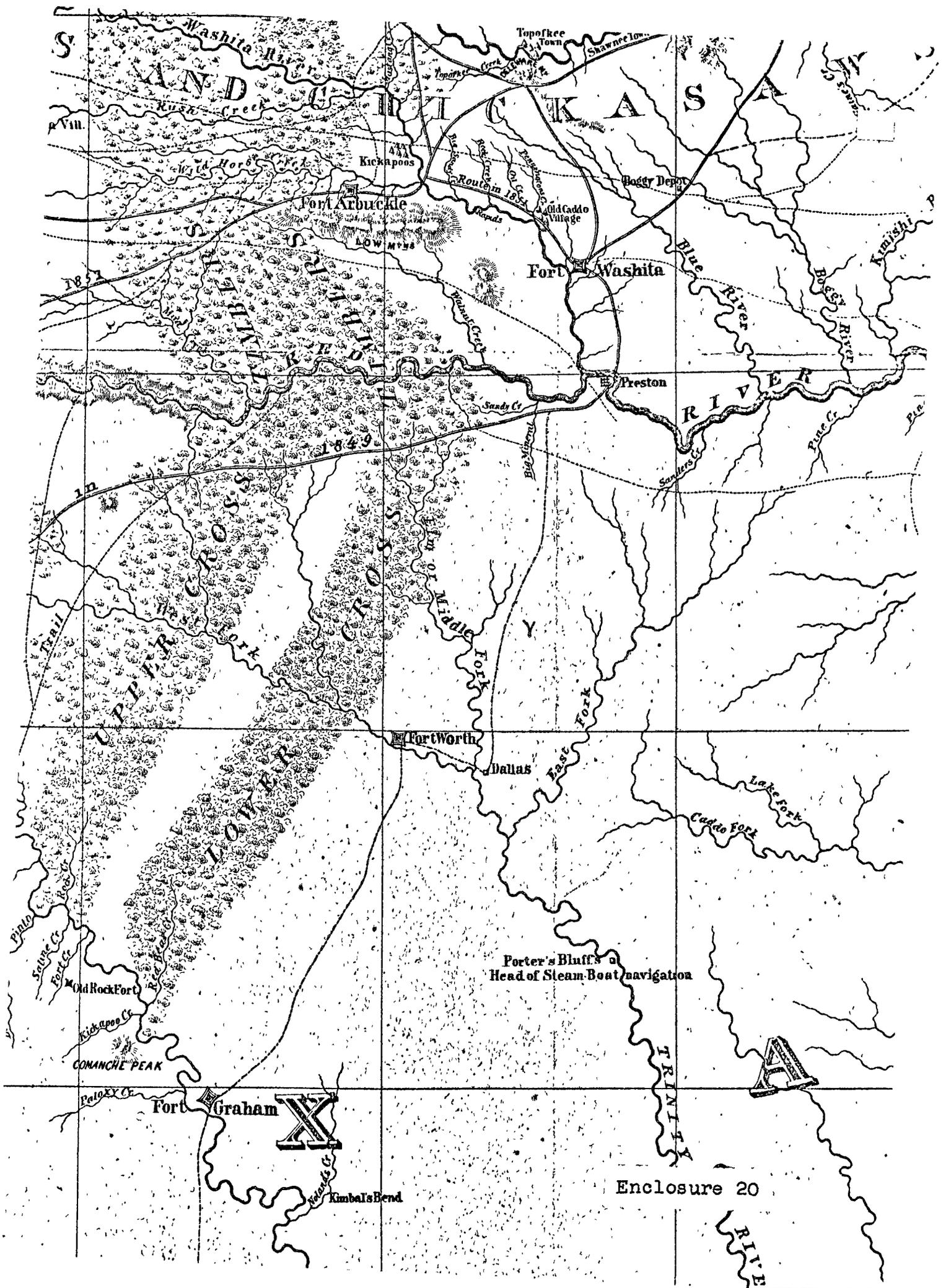


P.S. Duvall's Steam Lath. Press & Print.



Enclosure 19 b

1. Enclosure- Twenty
2. Date- 1852
3. Title- Map of the Country between the Frontier of Arkansas and New Mexico
4. Author- Captain Randolph B. Marcy
5. Purpose- This document embraces the sections explored in 1849, '50, '51, and '52 by Captain Marcy, 5th United States Infantry, under orders of the War Department. The continuation of the emigrant road from Fort Smith and Fulton, Arkansas, to the Valley of the Gila.
6. Authenticity or location- A copy is on file at The University of Texas Archives.
7. Description
 - a. General- This is only a section of a larger map. The different routes taken by Captain Marcy are indicated and dated with the year.
 - b. Cross Timbers- Marcy has the Cross Timbers marked in two separate strips as Upper and Lower. However, they have the same typical bend at the Red River as shown on his 1850 map [see enclosure 19].
8. Comments- Capt. Marcy passed through the Cross Timbers on six different occasions (see Exploration of the Red River of Louisiana, Senate Executive Document No. 54, 32nd Congress, 2d Session, p. 85), and never once traveled the length of the Cross Timbers.

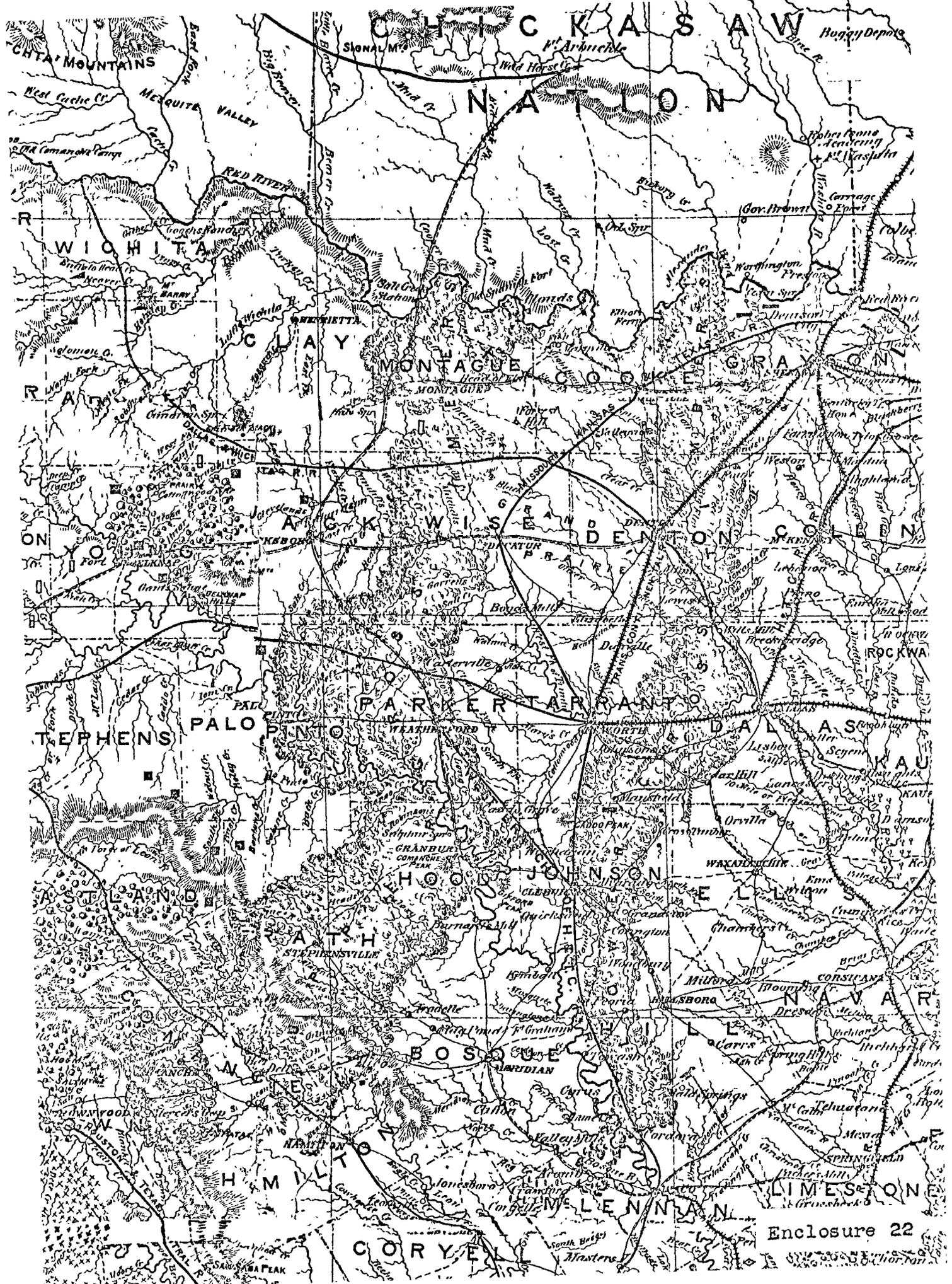


1. Enclosure- Twenty-one
2. Date- 1864
3. Title- J. H. Colton's Map of Texas
4. Author- Joseph Hutchins Colton
5. Purpose- Part of an Atlas
6. Authenticity or location- Taken from Colton's Condensed Octavo Atlas, by Joseph Hutchins Colton, New York, 1864, No. 41-42.
7. Description
 - a. General- It is interesting to note that the counties have been designated in the state well beyond the Cross Timbers. An idea of expansion may be obtained by comparing this map with the J. De Cordova Map [see enclosure 17].
 - b. Cross Timbers- While the Cross Timbers are only barely indicated, they are obviously in the wrong place. On a close inspection one may observe both the Upper and Lower Cross Timbers.
8. Comment- Proposed roads and railroads are located on this map which could be misleading.

1. Enclosure- Twenty-Two
2. Date- 1874
3. Title- A. R. Roessler's Latest Map of the State of Texas.
4. Author- Von Mittendarfer, Civil Engineer, Washington, D.C.
5. Purpose- Exhibited are the mineral and agricultural districts, post offices and mail routes, projected railroads and timber, prairie, swamp sands . . . etc.
6. Authenticity or location- Properly authenticated and on file at The University of Texas Archives.
7. Description
 - a. General- A combination of proposed and completed railroads is indicated on this map. The first railroad to reach Texas from the north was the Missouri-Kansas-Texas which arrived at Denison in December 1872. The Santa Fe Railroad touched Texas in 1886 [see S. G. Reed, A History of Texas Railroads, p. 376 and p. 283, respectively].
 - b. Cross Timbers- The two strips of Cross Timbers are fairly accurately drawn and agree, to some extent, in size and shape and location as shown on later maps. It should be observed that the railroads parallel the Lower Cross Timbers.

8. Comments- The section of this map is only a portion of a larger map of which the Cross Timbers area has been extracted.

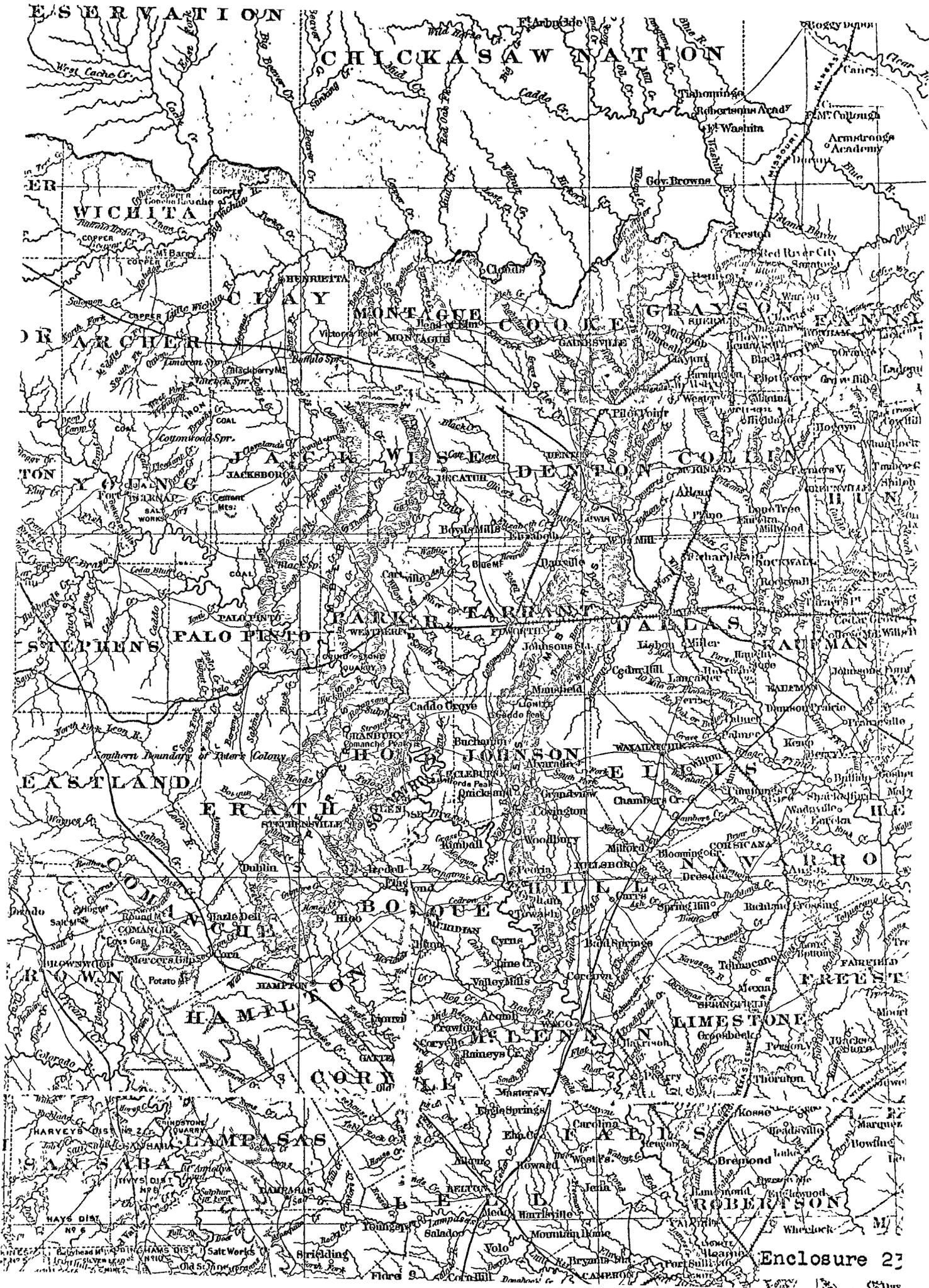
The City of the Cross Timbers is located south of Dallas, along the eastern edge of the Cross Timbers.



1. Enclosure- Twenty-Three
2. Date- 1876
3. Title- Colton's New Map of the State of Texas, The Indian Territory and adjoining portions of New Mexico, Louisiana and Arkansas .
4. Author- Joseph Hutchins Colton
5. Purpose- To revise a previous map. Apparently Colton's Map published twelve years earlier [see enclosure 21].received considerable criticism because Colton goes into a lengthy discussion to authenticate this map. "Compiled from the official county maps of the General Land Office, the personal reconnaissances and geological explorations of Professor A. R. Roessler, U.S. Coast Survey, U.S. General Land Office, the various Railroad constructions, information furnished by Mr. Pressler, and other authentic material by G. Woolworth Colton.
6. Authenticated or located- A copy of this map is located in The University of Texas Archives .
7. Discussion
 - a. General- The railroads from the north parallel the Lower Cross Timbers to Dallas and Forth Worth. The Indian Nations may be located north of Texas .

b. Cross Timbers- The area is generally in agreement with that presented on the Roessler map [see enclosure 22].

8. Comment- The section of this map is only a small part of a larger map.



1. Enclosure- Twenty-Four
2. Date- 1880
3. Title- Agricultural Map of Texas
4. Author- R. H. Loughridge, Ph.D., Special Agent.
5. Purpose- (Part of the Tenth Census Report.) This map was prepared to indicate the general area suitable for cotton growth and soil contrast and not directly related to trees. It was compiled from personal surveys and published reports by Loughridge.

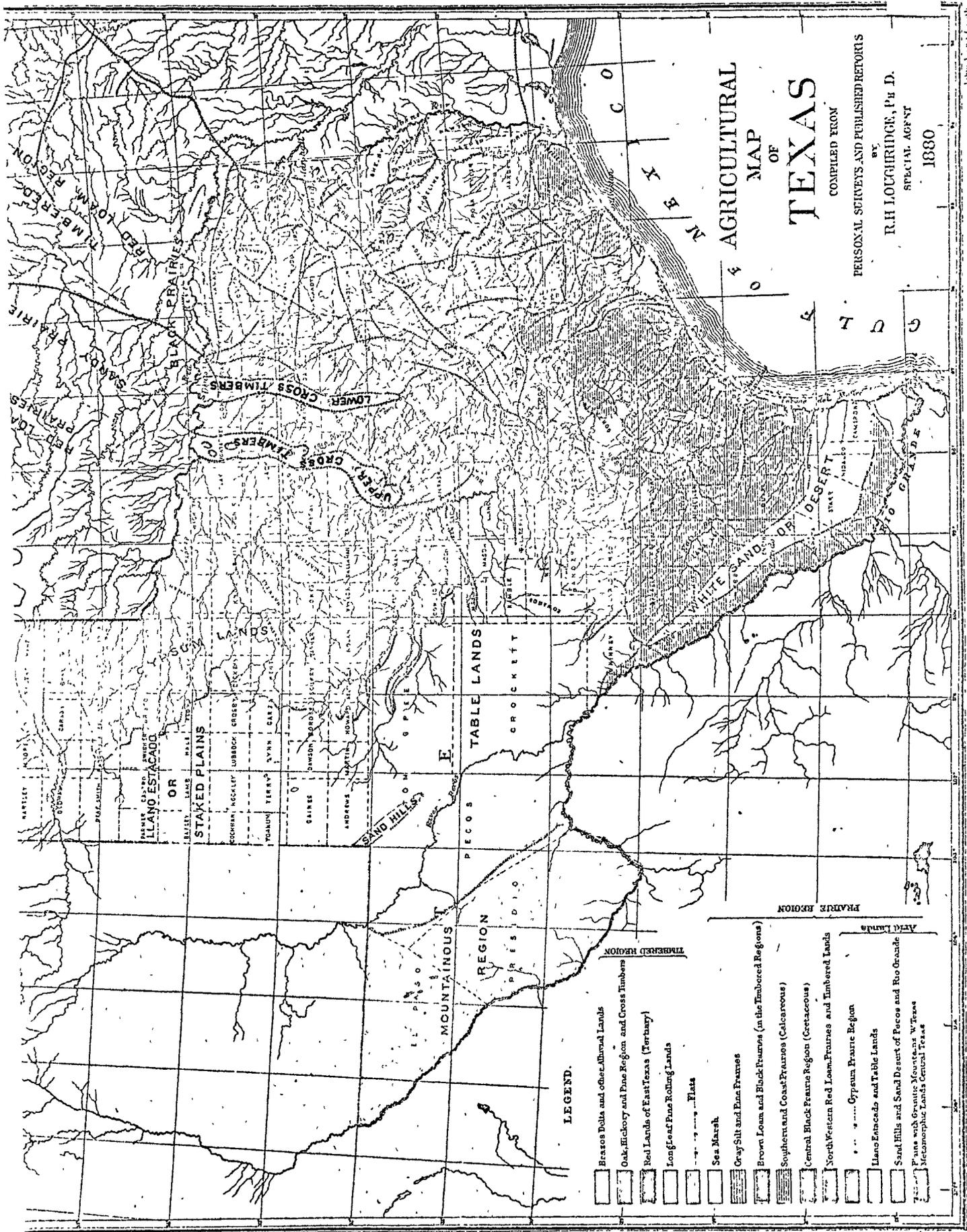
6. Authenticity or location- It is attached to a Report on the Cotton Production of the State of Texas, by R. H. Loughridge, which is part of the Report on Cotton Production in the United States, by Eugene W. Hilgard, House of Representatives, Misc. Document, No. 42, Part 5, 47th Cong., 2d Sess., Government Printing Office, Washington, 1884.

7. Description

- a. General- Additional county expansion may be observed. The railroads continue to be parallel to the Cross Timbers.

- b. Cross Timbers- Consideration is given to this area rather than emphasis. The false lines around the Cross Timber indicate only general area.

8. Comment- Robert T. Hill makes reference to the Loughridge map in his study [see "The Topography and Geology of the Cross Timbers and Surrounding Regions in North Texas," The American Journal of Science, Third Series, XXXIII, p. 294].



AGRICULTURAL MAP OF TEXAS

COMPILED FROM
PERSONAL SURVEYS AND PUBLISHED REPORTS
BY
R. H. LOUGHRAN, P. H. D.
SPECIAL AGENT
1880

LEGEND.

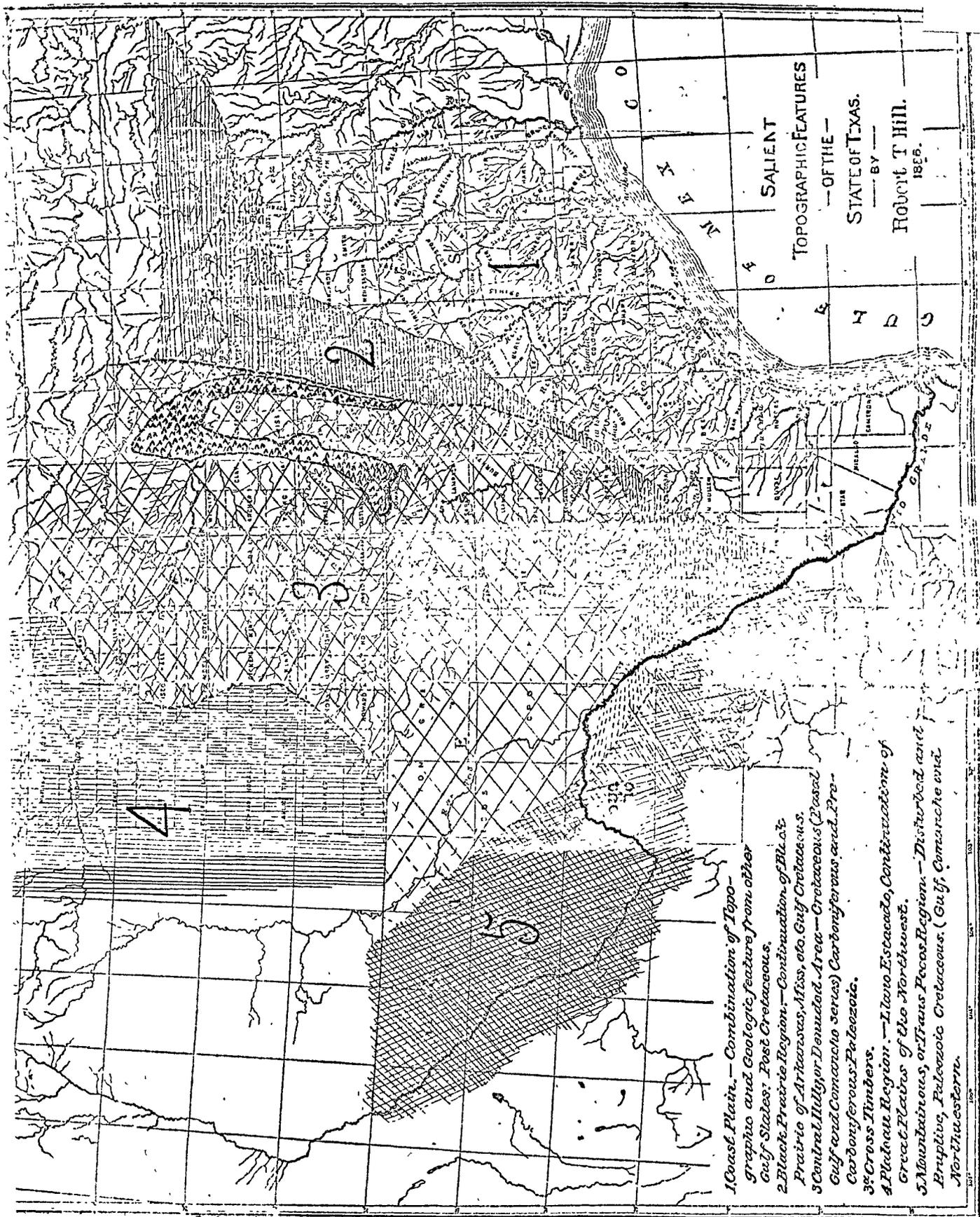
-  Braces Polts and other Mineral Lands
-  Oak, Hickory and Pine Region and Cross Timbers
-  Red Lands of East Texas (Turkey)
-  Longleaf Pine Rolling Lands
-  Plains
-  Sea Marsh
-  Gray Salt and Pine Prairies
-  Proven Loam and Black Prairies (in the Timbered Regions)
-  Southern and Coast Prairies (Calcareous)
-  Central Black Prairie Region (Cretaceous)
-  North-Western Red Loam, Prairies and Timbered Lands
-  Gypsum Prairie Region
-  Llano Estacado and Table Lands
-  Sand Hills and Sand Desert of Pecos and Rio Grande
-  Pine with Granite Mountains W. Texas
-  Metamorphic Lands Central Texas

1. Enclosure- Twenty-Five
2. Date- 1883
3. Title- Density of Forests
4. Author- Charles S. Sargent, Special Agent
5. Purpose- (Part of the Tenth Census Report of 1880,) This map was prepared to indicate the forest in the State of Texas.
6. Authenticity or location- Combined into the Report on the Forest of North America (Exclusive of Mexico) and presented as House of Representatives, Misc. Document 42, Part 9 of the 47th Congress, 2nd Session, Government Printing Office, Washington, 1884.
7. Description
 - a. General- This map covers the area of the subject in which we are directly concerned. On the original copy of the map the density of the forest is indicated by different shades of green. Therefore, it is necessary to alter the map slightly to emphasize this contrast.
 - b. Cross Timbers- The best indication of the area has been expressed by this map.
8. Comment- Since this map was prepared specifically for the purpose of showing the forest density, it is considered accurate as of 1883.

It should be noted that the southern end of the lower Cross Timbers has begun to lose its density (only 5 to 10 cords of wood per acre).

1. Enclosure- Twenty-Six
2. Date- 1886
3. Title- Salient Topographic Features of the State of Texas .
4. Author- Robert Thomas Hill
5. Purpose- This map was to orient the reader to the divisions of Texas while reading an article on the Cross Timbers.
6. Authenticity or location- This map accompanies an article by R. T. Hill, "The Topography and Geology of the Cross Timbers and Surrounding Regions in Northern Texas," published in The American Journal of Science, Third Series, vol. XXXIII, January to June 1887.
7. Description
 - a. General- This is one of the first maps that divided Texas into different geological regions. The accuracy of these areas is questionable, since there is no longer an Eastern Cross Timbers.
 - b. Cross Timbers- While the comments in Hill's article may be valid, the area depicted as the Cross Timbers is definitely inaccurate. The shape and size do not agree with his later maps [see enclosures 27 & 28]. In his later maps the top of the timbers is changed, making a radical right turn.

8. Comment- This map is included to show that even some of the best studies of this area required revision.



1. *Coast Plain.*—Combination of Topographic and Geologic features from other Gulf States: Post Cretaceous.
2. *Black Prairie Region.*—Continuation of El Paso Prairie of Arkansas, Miss, etc. Gulf Cretaceous.
3. *Central Uplift or Denuded Area.*—Cretaceous (Wash Gulf and Comanche series) Carboniferous and Pro-Carboniferous: Paleozoic.
- 3^c. *Cross Timbers.*
4. *Plains Region.*—Llano Estacado, Continuation of Great Plains of the Northwest.
5. *Mountainous, or Trans Pecos Region.*—Disturbed and Eruptive, Paleozoic Cretaceous. (Gulf, Comanche and Northwestern).

1. Enclosure- Twenty-Seven
2. Date- 1892
3. Title- Geographic Features of the Texan Region.
4. Author- Robert Thomas Hill
5. Purpose- To orient his readers to the soil in view of the underground water conditions.
6. Authenticity or location- Enclosed with Hill's publication, On the Occurrence of Artesian and Other Underground Waters, 1892.

Description

a. General- This map is a consideration primarily of the soil conditions.

b. Cross Timbers- It is interesting to note that Hill gives the Cross Timbers a sharp bend to the right just after it passes the Red River. The area appears to have reduced in size especially when one considers that the scale of the map has increased.

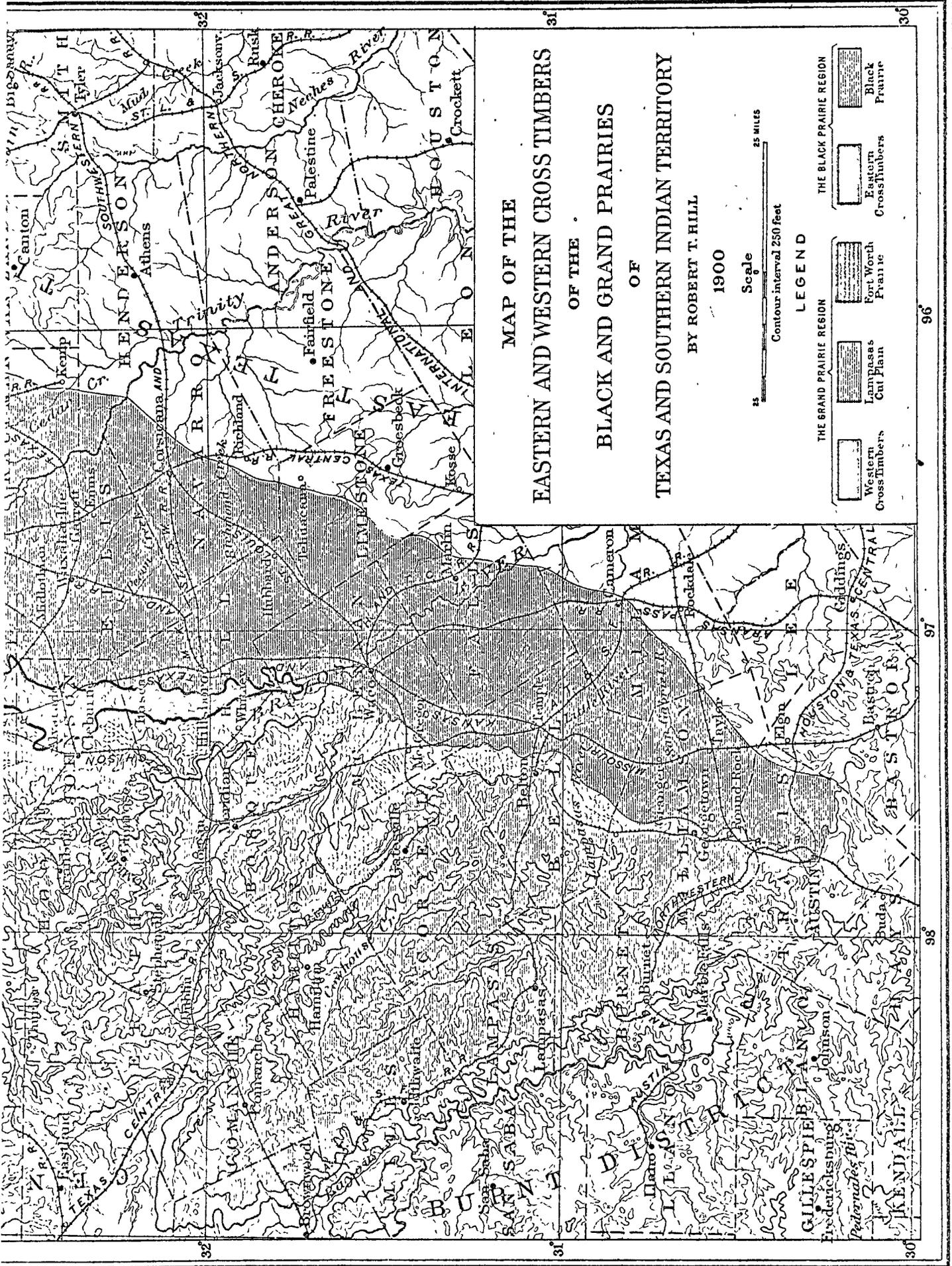
8. Comment- One should notice that the different routes continue to pass around the Cross Timbers.



Enclosure 27
 GEOGRAPHIC FEATURES
 OF THE
 TEXAN REGION.
 NORTH...

1. Enclosure- Twenty-Eight (a & b).
2. Date- 1900
3. Title- Map of the Eastern and Western Cross Timbers of the Black and Grand Prairies of Texas and Southern Indian Territory (in two sections)
4. Author- Robert Thomas Hill
5. Purpose- This map was to orient the reader and present data on the Cross Timbers.
6. Authenticity or location- This is a part of Hill's publication, "Geography and Geology of the Black and Grand Prairies, Texas," in the Annual Reports of the Department of Interior, Twenty-First Annual Report of the United States Geological Survey, presented as Document No. 5 to the House of Representatives, 56th Congress, 2nd Session.
7. Description
 - a. General- This map is an undisputed representation of the geographical area as of 1900.
 - b. Cross Timbers- One must keep in mind that this map is not necessarily indicating the forest growth, but more especially the geology and soil condition. When comparing this map with others, it appears that the land mass once occupied by the Cross Timbers has been reduced.

8. Comment- Contour lines which express the elevation difference on the map are recorded. The railroad routes flank both sides of the Lower Cross Timbers. The Chickasaw and Choctaw Indian Nations are located north of Texas.

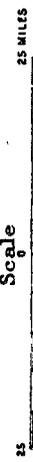


MAP OF THE
 OF THE
EASTERN AND WESTERN CROSS TIMBERS
BLACK AND GRAND PRAIRIES
 OF
TEXAS AND SOUTHERN INDIAN TERRITORY

BY ROBERT T. HILL

1900

Scale

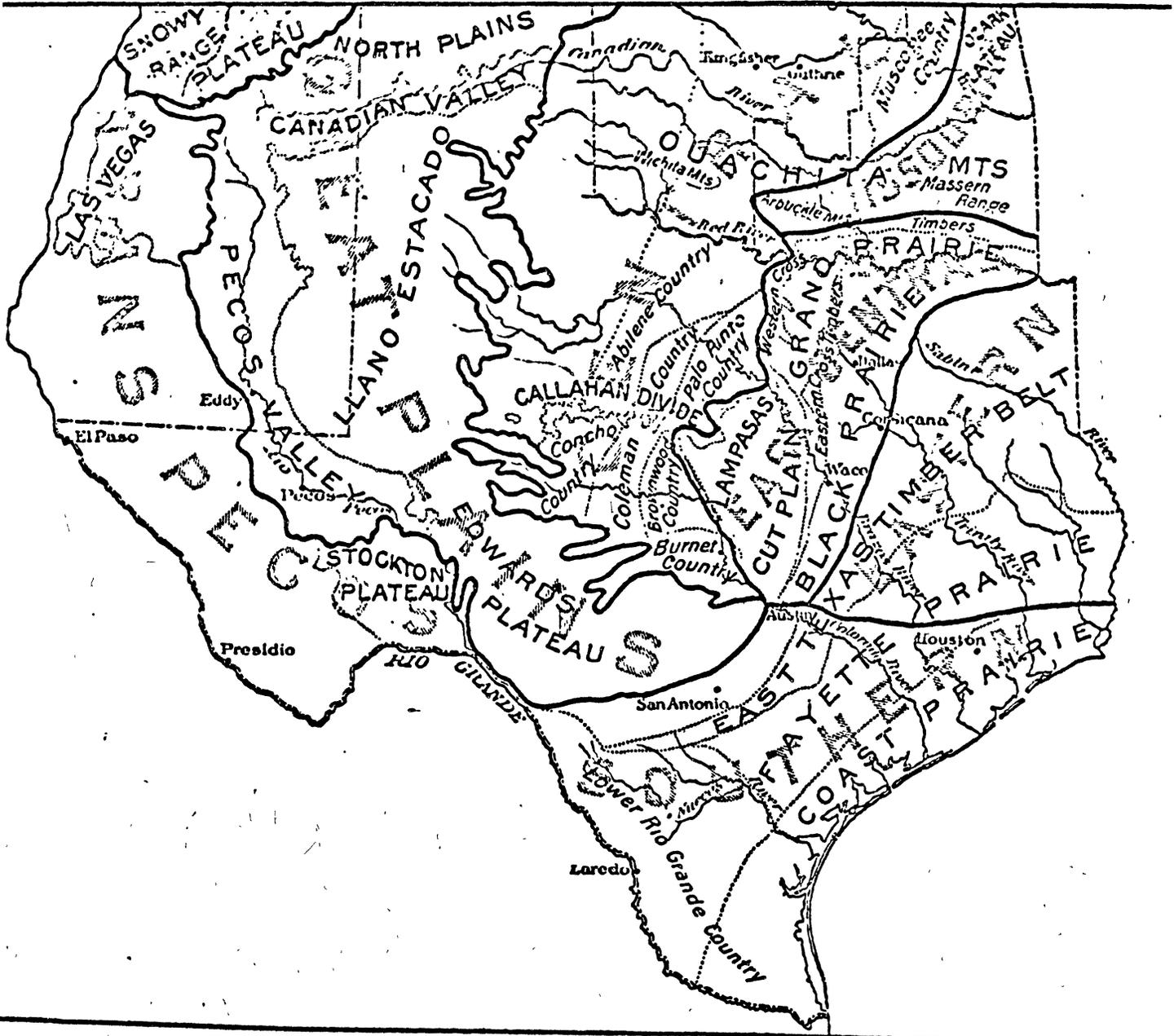


Contour interval 250 feet

LEGEND

- | | | | | | | | |
|--------------------------|-----------------------|--|--------------------|--------------------------|--------------------|--|-----------------------|
| | Western Cross Timbers | | Lampasas Cut Plain | | Fort Worth Prairie | | Eastern Cross Timbers |
| THE GRAND PRAIRIE REGION | | | | THE BLACK PRAIRIE REGION | | | |
| | Black Prairie | | | | | | |

1. Enclosure- Twenty-Nine
2. Date- 1904
3. Title- Provinces and Minor Subdivisions of
Greater Texas Region.
4. Author- William L. Bray
5. Purpose- To orient the reader on both the large
and small divisions of Texas.
6. Authenticity or location- This map is located on
page nine of William L. Bray's publication, Forest Re-
sources of Texas, and is a modification of the Hill Map
[see enclosure 28].
7. Description
 - a. General- Texas is divided into six major geo-
graphical districts, centered on the city of Austin, and
each of these areas is subdivided into smaller districts.
Both Cross Timbers areas are subdivisions in the East
Central District.
 - b. Cross Timbers- Bray has shown both the Eastern
and Western Cross Timbers as long, narrow strips extending
down almost to the City of Austin. We should take cog-
nizance of the sharp bend at the top of the timbers taken
from the latest map by Hill.
8. Comment- This map confirms the Hill map [see en-
closure 28].

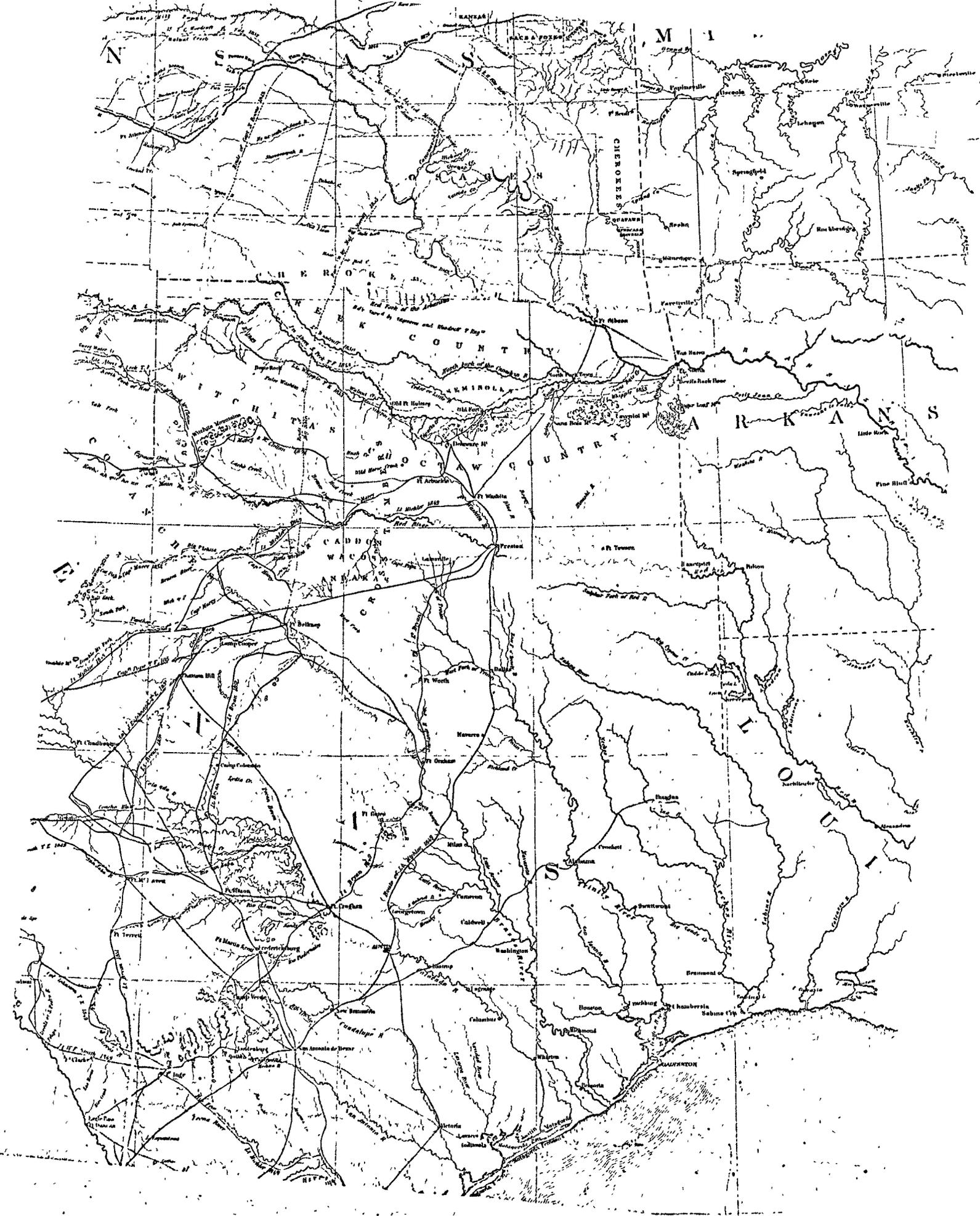


Provinces and minor subdivisions of the Greater Texas region. (From Hill's Phys. Geog. of Texas.

1. Enclosure- Thirty
2. Date- May 1, 1857, (reprint 1959)
3. Title- Map of the Territory of the United States from the Mississippi River to the Pacific Ocean.
Short title- [Trans-Mississippi West].
4. Author- Lt. G. K. Warren
5. Purpose- A consolidated topographical map of the west.
6. Authenticity or location- Listed as Map F, page xvii, and located in the pocket of Army Exploration in the American West, 1803-1863, by William H. Goetzmann, New Haven, Yale University Press, 1959.
7. Description
 - a. General- This map covers an area from Texas to Canada. It contains no marginal data; further, it is unsigned and undated. The routes explored in 1849 by Lt. Bryan are not in agreement with the facts presented in the Senate, Executive Document 64, 31st Congress, 1st Session, July 24, 1850. It was Lt. Whiting who explored the route along the Military Forts, from Fort Scott to Fort Croghan, to Fort Gates, to Fort Graham, to Fort Worth, to Fort Washita.

b. Cross Timbers- Only the words are recorded across the Red River near the 98th degree longitude. The two routes, parallel in the Lower Cross Timbers, lead to Fort Worth and Dallas.

8. Comment- Goetzmann considers the Warren's Map as a landmark in American Cartography. Lt. G. K. Warren was a member of the Topographical Engineers and was supervised by Emory and Humphreys.



M I

CHEROKEE COUNTRY

CHEROKEE

CHICKAMAUGA

CHICKASAW

CHICKSAW

B I B L I O G R A P H Y

B I B L I O G R A P H Y

Unpublished Material

- Clendinen, Lieutenant Colonel A., to Colonel Hugh McLeod, November 18, 1840, Stouths Plantation, Manuscript, Army Papers, Archives, Texas State Library.
- Cooke, William G., to Branch T. Archer, November 14, 1840, Camp on Bois d'Arc, Manuscript, Army Papers, Archives, Texas State Library. (Copy attached as enclosure 9b.)
- McLeod, Hugh, to Lt. Col. A. Clendinen, November 23, 1840, Adjutant and Inspector General's Office, Manuscript, Army Papers, Archives, Texas State Library.
- McLeod, Hugh, to Lt. Col. A. Clendinen, November 25, 1840, Adjutant and Inspector General's Office, Manuscript, Army Papers, Archives, Texas State Library.

Newspapers

- Telegraph and Texas Register (Houston), December 23, 1840 to September 21, 1842 (edited by Francis Moore, Jr.):
- Dallas Morning News, September 1, 1935 (editorial by Robert T. Hill, "Were the Seven Cities of Cibola in North Central Texas?").
- Dallas Morning News, March 19, 1936 (editorial by Robert T. Hill, "Roots of Texas History.").

Public Documents

- American State Papers, 38 vols., Gales and Seaton, Washington, 1832-1861.

Bray, William L., Forest Resources of Texas, U.S. Department of Agriculture, Bureau of Forestry, Bulletin No. 47. Government Printing Office, Washington, 1904.

Hill, Robert Thomas, "Geography and Geology of the Black Prairies, Texas," Twenty-first Annual Report, Department of Interior, U.S. Geological Survey, Part VII, House of Representatives Document No. 5, 56 Congress, 2 Session. Government Printing Office, Washington, 1901.

House of Representatives Report No. 474, Regulating the Indian Department, 23 Congress, 1 Session, Gale and Seaton printers, Washington, May 20, 1834.

House of Representatives, Executive Document 45, 31 Congress, 1 Session, February 21, 1850, Printed at the Union Office, Washington, 1850.

House of Representatives, Executive Document No. 42, 32 Congress, 1 Session, March 9, 1860, Printed at the Union Office, 1860.

Loughridge, R. H., Report on Cotton Production of the State of Texas, Misc. Document 42, Part 5, House of Representatives, 47 Congress, 2 Session, in Report on Cotton Production in the United States, by Eugene W. Hilgard, Government Printing Office, Washington, 1884.

Marcy, Randolph B., Exploration of the Red River of Louisiana, in the year 1852, Senate Executive No. 54, 32 Congress, 2 Session, Robert Armstrong, Public Printer, Washington, 1853.

Sargent, Charles S., Report on the Forest of North America, (Exclusive of Mexico), Misc. Document 42, Part 9, House of Representatives, 47 Congress, 2 Session, Government Printing Office, Washington, 1884.

Senate Executive Document No. 64, 31 Congress 1 Session, July 24, 1850, Printed at the Union Office, Washington, 1850.

Senate Executive Document No. 78, 33 Congress, 2 Session, Report of Explorations and Surveys, Beverley Tucker Printer, Washington, 1855-56.

Primary Books

- Barker, Eugene C., Austin Papers, in 3 vols.
- Volume I, issued in two parts (really two volumes) as volume two of the Annual Report of the American Historical Association, 1919, Washington, 1924.
- Volume II, issued as volume two of the Annual Report of the American Historical Association, 1922, Washington, 1928.
- Volume III, issued as the Austin Papers, vol. 3, Austin, Texas, University Texas Press, no date.
- Bolton, Herbert Eugene (trans. and ed.), Athanes de Mezieres and the Louisiana-Texas Frontier, 1768-1780, The Arthur H. Clark Co., Cleveland, 1914.
- Bonnell, George W., Topographical Description of Texas (Plus accounts of Indian Tribes), Clark, Wing and Brown, Austin, 1840.
- Bowman, Isaiah, Forest Physiography (Physiography of the United States and principles of soils in relation to forestry), J. Wiley and Sons, New York, 1911.
- Bray, William L., The Timber of the Edwards Plateau of Texas, U.S. Department of Agriculture, Bureau of Forestry, Bulletin No. 49, Government Printing Office, Washington, 1904.
- Celiz, Fray Francisco, Diary of the Alarcón Expedition into Texas, 1718-1719 (translated by Fritz Leo Hoffmann), The quivira Society, Los Angeles, 1935.
- Chabot, Frederick C. (trans.), Excerpts from the Memories for the History of the Province of Texas, by Padre Fray Juan Agustín de Morfi, privately published by Naylor Printing Co., San Antonio, Texas, 1932.
- Colton, Joseph Hutchins, Colton's Condensed Octavo Atlas, J. H. Colton, New York, 1864.

- De Cordoba, Jacob, Texas: Her Resources and Her Public Men (a companion for J. De Cordova's new and correct map of the State of Texas--see enclosure 13). J. B. Lippincott and Co., Philadelphia, 1858.
- Falconer, Thomas, Letters and Notes on the Texan Santa Fe Expedition, 1841-1842, Dauber and Pine Bookshop Ins., New York City, 1930.
- Folsom, Charles J., Mexico: 1842. (Description of the Country), Wiley and Putnam, New York, 1842.
- Fulton, Maurice Garland (ed.), Diary and Letters of Josiah Gregg, University of Oklahoma Press, Norman, 1841-1944.
- Garrison, George Pierce (ed.), Diplomatic Correspondence of the Republic of Texas, in 3 vols., as volume two of the Annual Report of the American Historical Association, Government Printing Office, Washington, 1911.
- Golyer, E. De (ed.), The Journal of the Three Englishmen Across Texas in 1568, by David Ingram, The Peripatetic Press, El Paso, 1947.
- Gulick, Charles Adams (ed.), The Papers of Mirabeau Buonaparte Lamar, in 6 vols.,
 Volumes I and II, assisted by Katherine Elliott, published by A. C. Baldwin and Sons, Austin, Texas, 1921-1922.
 Volume III, assisted by Katherine Elliott, published by Von Boeckmann-Jones Co., Austin, Texas, no date.
 Volume IV, Charles Adams Gulick and Winnie Allen (ed.), published by Von Boeckmann-Jones Co., Austin, 1925.
 Volumes V and VI, by Harriet Smither (ed.), published by Von Boeckmann-Jones Co., Austin, Texas, no dates.
- Hackett, Charles Wilson (ed.), Pichardo's Treatise on the Limits of Louisiana and Texas, The University of Texas Press, Austin, Texas, 1946.
- Hill, Robert Thomas, On Occurrence of Artesian and Other Underground Waters in Texas, New Mexico, and Indian Territory, Washington, D.C., 1892.

- Holley, Mrs. Mary Austin, Texas: Original Narratives of Texas History and Adventure, J. Clarke and Co., Lexington, Ky., 1836 (Reprint, The Steck Co., Austin, 1935).
- Kendall, George W., Narrative of the Texan Santa Fe Expedition, in 2 vols., Wiley and Putnam, London, 1844 (Reprinted by The Steck Co., Austin, Texas, 1935).
- Kennedy, William, Texas: Its Geography, Natural History and Topography, Benjamin and Young, New York, 1844.
- Kennedy, William, Texas: The Rise, Progress, and Prospects of the Republic of Texas (Reprint from Second edition, London, 1841, by the Molyneaux Craftsmen, Inc., Fort Worth, Texas, 1925).
- Newell, Rev. Chester, History of the Revolution in Texas (together with the latest Geographical, Topographical and Statistical Accounts of the Country) (Reprint by The Steck Co., 1935).
- Roberts, Oram M., A Description of Texas, Its Advantages and Resources, Gilbert Book Co., St. Louis, Mo., 1881.
- Smith, Edward, Account of a Journey through North Eastern Texas Undertaken in 1849, Hamilton, Adams and Company, London, 1849.
- Stiff, Colonel Edward, The Texan Emigrant, Published by George Conclin, Cincinnati, 1840.
- Wheeler, Homer Webster, Buffalo Days (Forty years in the old West: the personal narrative of a cattleman, Indian fighter and Army Officer), The Bobbs-Merrill Co., Indianapolis, 1925.
- Winship, George Parker, The Coronado Expedition, 1540-1541, Fourteenth Annual Report of the Bureau of Ethnology, Vol. XIV, Government Printing Office, Washington, D.C., 1896.

Primary Articles

- Baker, Charles Laurence, "Physiography," in Review of the Geology of Texas by John August Udden, Charles Laurence Baker and Emil Bose, University of Texas Bulletin No. 44, Austin, 1916.
- Bean, Ellis P., "Memoir of Ellis P. Bean," in Henry Yoakum, History of Texas, in 2 vols., Redfield, New York, 1855 (Reprinted by The Steck Co., Austin, Texas, 1935).
- Gibbens, (ed.), "Lawrie's Trip to Northeast Texas, 1854-1855," in Southwestern Historical Quarterly, XLIII, Walter P. Webb and H. Bailey Carroll (eds.), The Texas State Historical Association, Austin, Texas, 1945.
- Hayes, G. L., and Jesse H. Buell, "Trees also Need Water at the Right Time and Place," in The Yearbook of Agriculture, 1955, Water, U.S. Department of Agriculture, Government Printing Office, Washington, 25, D.C., 1955.
- Hill, Robert Thomas, "The Topography and Geology of the Cross Timbers and Surrounding Regions in Northern Texas," in The American Journal of Science, Third Series, XXXIII, Nos. 193-198, J. D. and E. S. Dana, New Haven, Conn., 1887.
- Lippincott, James S., "Observations on Atmospheric Humidity," in Report of the Commissioner of Agriculture for the Year 1865, Government Printing Office, Washington, 1866.
- Sellards, Elias Howard, Benjamin Carroll Tharp, and Robert Thomas Hill, "Investigations on the Red River Made in Connection with the Oklahoma-Texas Boundary Suit," University of Texas Bulletin No. 2327, University of Texas Press, Austin, July 15, 1923.
- Smith, Buckingham (trans.), "Narratives of the Career of Hernando de Soto in the Conquest of Florida as told by a Knight of Elvas," New York, 1866, Documents of Texas History, Vol. I, by Ernest Wallace and David M. Vigness (ed.), Library of Texas Technological College, College, Lubbock, Texas, 1960.

- Starr, Rev. Frederick, "American Forests: Their Destruction and Preservation," in Report of the Commission of Agriculture for the Year 1865, Government Printing Office, Washington, 1866.
- Trewartha, Glenn T., "Climate and Settlement of the Sub-humid Lands," Yearbook of Agriculture, Climate and Man, 1941, U.S. Department of Agriculture, Government Printing Office, Washington, D.C., 1941.
- Warrall, I. R., "Northern Texas," Texas Almanac, 1868, W. Richardson and Co., Publishers, Galveston, Texas, Dec. 15, 1867.
- Zon, Raphael, "Climate and the Nation's Forests," Yearbook of Agriculture, Climate and Man, 1941, U.S. Department of Agriculture, Government Printing Office, Washington, D.C., 1941.

Secondary Books

- Batty, Joseph H., How to Hunt and Trap, A. Cogswell, New York, 1878.
- Billington, Ray Allen, Westward Expansion, a History of the American Frontier, 2nd edition, The Macmillan Co., New York, 1960.
- Binkley, William Campbell, The Expansionist Movement in Texas, 1836-1850, University of California Press, Berkeley, Calif., 1925.
- Branch, Edward Douglas, The Hunting of Buffalo, D. Appleton and Co., New York and London, 1929.
- Carroll, Horace Bailey, The Texan Santa Fe Trail, Panhandle-Plains Historical Society, Canyon, Texas, 1951.
- Clark, Dan Elbert, The West in American History, Thomas Y. Crowell Co., New York, 1937.

- Craighead, F. C., and others (editors), The Yearbook of Agriculture, 1949, Trees, U.S. Department of Agriculture, Government Printing Office, Washington, D.C., 1949.
- Gard, Wayne, The Great Buffalo Hunt, Knopf, New York, 1959.
- Garretson, Martin S., The American Bison, New York Zoological Society, New York, 1938. (The story of its extermination as a wild species and its restoration under federal protection.)
- Goetzmann, William H., Army Explorations in the American West, 1803-1863, Yale University Press, New Haven, 1959.
- Hamersly, Thomas H. S., Complete Regular Army Register, 3rd ed., T. H. Hamersly (pub.), Washington, 1881.
- Hamner, Laura Vernon, Short Grass and Long Horns. University of Oklahoma Press, Norman, 1943.
- Lowrie, Samuel Harman, Cultural Conflict in Texas, 1821-1835, Columbia University Press, New York, 1932.
- McGregor, Stuart Malcolm, Texas Almanac, 1961-62, published by A. H. Belo Corp., Dallas, Texas, 1961.
- Neider, Charles, The Great West, Coward-McCann, New York, 1958.
- Pirsson, Louis Valentine, A Text Book of Geology, John Wiley and Sons, New York, 1915.
- _____. Introduction to Geology, John Wiley and Sons, New York, 1924.
- Richardson, Rupert N., Texas: The Lone Star State, Prentice-Hall, Inc., Englewood Cliffs, N.J., 1958.
- Turner, Frederick Jackson, The Frontier in American History, Henry Holt and Co., New York, 1920 and 1927.
- Vines, Robert A., Trees, Shrubs and Woody Vines of the Southwest, The University of Texas Press, Austin, Texas, 1960.

Webb, Walter Prescott, The Great Plains, Grosset's University Library, Grosset and Dunlap, New York, 1931.

Webb, Walter Prescott, and H. Bailey Carroll (editors), Hand Book of Texas in 2 vols., Texas State Historical Association, Austin, Texas, 1952.

Secondary Articles

Cope, Edward D., and J. S. Kingsley (editors), The American Naturalist, an Illustrated Magazine of Natural History, Volume XXI, J. B. Lippincott Co., Philadelphia, 1887.

Nielsen, George R., "Mathew Caldwell," Southwestern Historical Quarterly, Vol. LXIV, July, 1960, to April, 1961, H. Bailey Carroll, editor, The Texas State Historical Association, Austin, Texas, 1961.

Quintero, J. A., "Philip Nolan and His Companions," Texas Almanac, 1868, W. Richardson and Co., publisher, Galveston, Dec. 15, 1867.

Maps, Charts and Sketches

Maps, Unpublished

Anonymous, [Spanish Sketch] 1789 , Manuscript, Archives, The University of Texas, Barker History Center, Austin, Texas.

Austin, Stephen Fuller, Map of the Country of the Comanche, August 28, 1827, Manuscript, Stephen F. Austin Collection, Archives, The University of Texas, Barker History Center, Austin, Texas.

Austin, Stephen Fuller, [Map of North Central Texas], 1828 Manuscript, Stephen F. Austin Collection, Archives, The University of Texas, Barker History Center, Austin, Texas

Austin, Stephen F., [Stephen F. Austin's Map of Texas] 1829? Manuscript, Eugene C. Barker Collection, Archives, The University of Texas, Barker History Center, Austin, Texas.

Upshur, H. L., Sketch Showing the Route of the Military Road from Red River to Austin, 1841, Manuscript, Map Collection, Archives, The University of Texas, Barker History Center, Austin, Texas.

Maps, Public Documents

Bray, William L., Provinces and Minor Subdivisions of Greater Texas Region; 1904, in Forest Resources of Texas by William L. Bray, U.S. Department of Agriculture, Bureau of Forestry, Bulletin No. 47, Government Printing Office, Washington, D.C., 1904.

Hill, Robert Thomas, Map of the Eastern and Western Cross Timbers of the Black and Grand Prairies of Texas and Southern Indian Territory, 1900, in "Geography and Geology of the Black and Grand Prairies, Texas," by R. T. Hill, published in Annual Reports of the Department of Interior, 21st Annual Report of the United States Geological Survey. House of Representatives, Document No. 5, 56th Congress, 2nd Session, Government Printing Office, Washington, D.C., 1901.

Johnson, J. E., Reconnoissances of Routes from San Antonio De Bexar, El Paso Del Norte &c &c, 1849 in Senate Executive Document No. 64, 31st Congress, 1st Session, July 24, 1850.

Loughridge, R. H., Agricultural Map of Texas, 1880 (Part of Tenth Census Report), Senate Document No. 54, Part 1, 47th Congress, 2nd Session, Report on Cotton Production in the United States by Eugene W. Hilgard, Government Printing Office, Washington, D.C., 1884.

Marcy, Randolph B., Topographical Map of the Road from Fort Smith, Arkansas to Santa Fe, New Mexico and from Dona Ana, New Mexico to Fort Smith, in House of Representatives Executive Document No. 45, 31st Congress, 1st Session, Feb. 21, 1850, Washington, D.C., 1850.

Sargent, Charles S., Density of Forest, 1883 (Part of the Tenth Census Report), Senate Document No. 54, Part 9, 47th Congress, 2nd Session, Government Printing Office, Washington, D.C., 1884.

Unknown, Map of the Western Territory, in Report No. 474, 23rd Congress, 1st Session, House of Representatives, dated May 20, 1834, Gales and Seaton, Printer, Washington, D.C., 1835.

Maps, Published (Printed)

Bradford, Thomas Gamalid, [Texas], 1842, Manuscript, Map Collection, Archives, The University of Texas, Barker History Center, Austin, Texas.

Colton, Joseph Hutchins, Colton's New Map of the State of Texas, The Indian Territory and Adjoining portions of New Mexico, Louisiana and Arkansas, 1876, Swante Palm Collection, Archives, The University of Texas, Barker History Center, Austin, Texas.

De Cordova, J., J. De Cordova's Map of the State of Texas, 1849, Manuscript, Archives, The University of Texas, Barker History Center, Austin, Texas.

Disturnell, Jr. (Publisher), Mapa de Los Estados Unidos de Mejico, 1846, Manuscript (Negative), Latin American Collection, The University of Texas Library. The original is on file at the U.S. Library of Congress, Washington, D.C.

Emory, William H., Map of Texas and the Country Adjacent, 1844, published by the War Department for the State Department of the United States, Manuscript, Archives, The University of Texas, Barker History Center, Austin, Texas.

Ensign, E. H., Map of Texas and Part of Mexico, 1846, Manuscript, Archives, The University of Texas, Barker History Center, Austin, Texas.

Marcy, Randolph B., Map of the Country between the Frontier of Arkansas and New Mexico, 1852, Manuscript, Archives, The University of Texas, Barker History Center, Austin, Texas

Mittendarfer, Von, A. R. Roessler's Latest Map of the State of Texas, 1874, Manuscript, Archives, The University of Texas, Barker History Center, Austin, Texas.

Tanner, H. S., Map of Texas with Parts of Adjoining States, 1830, Manuscript, Map Collection, Archives, The University of Texas, Barker History Center, Austin, Texas. The original is a folded pocket map issued as a part of the Tanner Atlas.

Maps in Publications

Arrowsmith, John, Map of Texas, in Texas: The Rise, Progress, and Prospects of the Republic of Texas by William Kennedy, reprint from second edition, London, 1841, by Molyneaux Craftsman, Inc., Fort Worth, Texas, 1925.

Bogue D., Drawn by W. Kemble and Engineered by N. York, Texas and Part of Mexico and the United States, 1844, in Narrative of the Texan Santa Fe Expedition by George W. Kendall, 6th edition, Harper, New York, Vol. I., 1850.

Colton, Joseph Hutchins, J. H. Colton's Map of Texas, 1864, in Colton's Condensed Octavo Atlas by Joseph H. Colton, New York, 1864.

Conclin, George, Texas, in The Texan Emigrant by Colonel Edward Stiff, published by George Conclin, Cincinnati, 1840.

Hill, Robert T., Salient Topographic Features of the State of Texas, 1886, in "The Topography and Geology of the Cross Timbers and Surrounding Regions of Northern Texas," by R. T. Hill, published in The American Journal of Science, Third Series, Vol. XXXIII, January to June, 1887.

- Hill, Robert Thomas, Geographic Features of the Texas Region, 1892, in On the Occurrence of Artesian and Other Underground Waters, by R. T. Hill, 1892.
- Lee, E. F., Map of Texas, in History of Texas or the Emigrant Farmer and Political Guide by David B. Edwards, published by J. A. James and Co., Cincinnati, 1836.
- Moody, R. B. (Printer), Part of North Eastern Texas Shewing [sic] the Route of the Inspectors, 1849, in Account of a Journey through North Eastern Texas Undertaken in 1849, by Edward Smith, Hamilton, Adams and Co., London, 1849.
- Moody, R. B. (Printer), Map of Texas, 1849, in Account of a Journey through North Eastern Texas Undertaken in 1849, by Edward Smith, Hamilton, Adams and Co., London, 1849.
- Tanner, H. S., Map of Texas, 1835, in History of the Revolution in Texas, by Rev. Chester Newell (reprinted by The Steck Co., 1935).
- Warren, G. K., Map of the Territory of the U.S. from the Mississippi River to the Pacific Ocean or Trans-Mississippi West, 1857, in Army Explorations in the American West by William H. Goetzmann, Yale University Press, New Haven, 1959.

Annex A

Cronology of Activity in the Cross Timbers

Explorations

Spanish

Francisco Vazquez de Coronado	1541
Luis Moscoso de Alvarado	1542
David Ingram (Three Englishmen)	1568
Don Martín Alarcón	1718
Riveria	1728
Athanese de Mézières	1778
Spanish Sketch (enclosure 1)	1789

Anglo-American

Philip Nolan	1801
Hunter and Dunbar	1804
John Sibley	1805
James Long	1817
John Milton Niles	1826
Colonel Henry Dodge	1834

The Republic of Texas (to encourage settlers)

Editor of the <u>Caddo Gazette</u>	1836
Mrs. Mary Austin Holley	1836
David Edwards	1836
A. A. Parker	1836

Dr. Fields (<u>Three years in Texas</u>)	1836
Rev. Chester Newell	1838
Thomas J. Rusk (Army Papers)	1839
George W. Bonnell	1840
Colonel Edward Stiff	1840
William Kennedy	1840
Colonel William G. Cooke (Army Papers)	1840
Military Road	1840
Santa Fe Expedition (Texan)	1841
Charles J. Folsom (Mexico)	1842
William Kennedy (Texas)	1844
George Wilkins Kendall	1844
United States Interest in Routes West	
Lieut. William H. C. Whiting	1849
Edward Smith (English)	1849
Capt. Randolph B. Marcy	1849-52
Lieut. A. W. Whipple	1853
Capt. A. A. Humphry	1855
Capt. John Pope	1856
Major William H. Emory	1857
Edward F. Beale	1858
(Civil War, 1861-65; Cattle Market; Railroad Construction)	

Re-evaluation

Charles S. Sargent (Forest)	1883
R. H. Loughridge (Cotton)	1884
Robert T. Hill (Topography and Geology)	1887-1901
William L. Bray (Forest)	1904

(Note: The date given is either the date of the activity, visit or publication.)