

FENCE DIAGRAM OF THE COAHUILA AND COMANCHE SERIES
(LOWER CRETACEOUS), TEXAS

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A fence diagram of formations comprising the Lower Cretaceous Coahuila and Comanche Series in Texas, was prepared as part of a stratigraphic study of the Lower Cretaceous for Dr. Walter Sadlick's course "Regional Stratigraphy of North America", at the University of Houston. Because no comparable diagram was found during an extensive search of the literature, one is presented here.

It is schematic to a degree, but useful nevertheless, in that it illustrates the regional distribution of these strata in the state of Texas. Formation boundaries, where known, are included, but only the Coahuila Series and the groups comprising the Comanche Series are identified.

The Trinity, Fredericksburg, and Washita Groups were originally defined as rock sequences (Wilmarth, 1938), but as additional data was accumulated, biostratigraphic correlations were made away from the type areas and across lithofacies boundaries. In this manner, these names have come to have a time-stratigraphic usage rather than a strictly stratigraphic usage. Murray (1961) attempted to clarify the situation by referring to the Trinity, Fredericksburg, and Washita as stages -- to include all strata which could reasonably be demonstrated to be of equivalent age to the type sequence of the unit in question. The groups are used in this sense on the fence diagram. A tabulation of the sections is presented below. It is recognized that legitimate arguments can be made against some of the correlations, however space does not permit justification of those correlations actually used here.

Section 1: Composite section, Franklin Mountains, El Paso Co., Texas (West Texas Geological Society, 1958).

<u>Unit</u>	<u>Thickness (feet)</u>
Washita Group	
Buda Fm.	60
Grayson (Del Rio) Fm.	60
Georgetown Fm.	485
Fredericksburg Group	
Edwards Fm.	125 †

Section 2: Composite Section, Kent Quadrangle, Culberson Co., Texas (Brand and De Ford, 1958).

<u>Unit</u>	<u>Thickness (feet)</u>
Washita Group	
Buda Fm.	122 +
Grayson (Del Rio) Fm.	see note below
Boracho Ls.	428
Fredericksburg Group	
Finlay Ls.	40 est.
Trinity Group	
Cox Ss.	130
Yearwood Fm.	150 +

(Note: Grayson (Del Rio) may be represented by either an unconformity between the Buda Fm. and the Boracho Ls., or by a discontinuous sandstone at the base of the Buda Fm.)

Section 3: Composite section, Van Horn Mountains, Culberson Co., Texas (Permian Basin Section, S. E. P. M., 1958).

<u>Unit</u>	<u>Thickness (feet)</u>
Washita Group	
Buda Fm.	140
Grayson (Del Rio) Fm.	29
Boracho Ls.	845
Fredericksburg Group	
Finlay Ls.	173
Trinity Group	
Cox Ss.	1200 †
Yearwood Fm.	204

Section 4: Composite section, northern Sierra Pilares, Chihuahua, Mexico (Permian Basin Section, S. E. P. M., 1958).

<u>Unit</u>	<u>Thickness (feet)</u>
Washita Group	
Buda Fm.	76
Grayson (Del Rio, Eagle Mt.) Fm.	106
Boracho Ls. equiv.	2514
Fredericksburg Group	
Finlay Ls. equiv.	709
Trinity Group	
Cox Ss.	1670
Bluff Ls.	225
Yucca Fm.	2104 +

Section 5: Composite Section, Glass Mountains, Brewster Co., Texas (King, 1938).

<u>Unit</u>	<u>Thickness (feet)</u>
Washita Group	
Buda-Grayson (Del Rio) Fm.'s undiff.	30
Georgetown Fm.	187
Kiamichi Fm.	65
Fredericksburg Group	
Edwards Fm. equiv.	230
Comanche Peak-Walnut Fm.'s undiff.	65
Trinity Group	
Maxon Ss.	90
Glen Rose Fm.	55

Section 6: Composite Section, Big Bend National Park, Brewster Co., Texas (West Texas Geological Society, 1965).

<u>Unit</u>	<u>Thickness (feet)</u>
Washita Group	
Buda Fm.	?
Grayson (Del Rio) Fm.	200 ±
Santa Elena Ls.	740
Sue Peaks Fm.	275
Fredericksburg Group	
Del Carmen Ls.	465
Telephone Canyon Fm.	145
Trinity Group	
Glen Rose Fm.	100 +

Section 7: Composite section, Lynn and Borden Co.'s, Texas. Modified from Brand (1953).

<u>Unit</u>	<u>Thickness (feet)</u>
Washita Group	
Duck Creek Fm.	13
Kiamichi Fm.	26
Fredericksburg Group	
Edwards Fm.	34 +
Comanche Peak Fm.	78
Walnut Fm.	13
Trinity Group	
Paluxy Fm.	26

Section 8: Killiam No. 1, Parker, southeast Val Verde Co., Texas (South Texas Geological Society, 1960).

<u>Unit</u>	<u>Thickness (feet)</u>
Washita Group	
Buda Fm.	50 +
Grayson (Del Rio) Fm.	90
Georgetown Fm.	220
Kiamichi Fm.	380
Fredericksburg Group	
Edwards Fm.	80
Trinity Group	
Glen Rose Fm.	1470

Section 9: Humble No. 2, Pryor, west-central Zavalla Co., Texas (Zink, 1957).

<u>Unit</u>	<u>Thickness (feet)</u>
Washita Group	
Buda Fm.	122
Grayson (Del Rio) Fm.	176
Georgetown Fm.	428
Kiamichi Fm.	393
Fredericksburg Group	
Edwards Fm.	270
Trinity Group	
Glen Rose Fm.	1640
Pearsall Fm.	640
Coahuila Series	
Sligo Fm.	360
Hosston Fm.	?

Section 10: Stanolind No. 1, Schmidt, western Guadalupe Co., Texas (Tucker, 1962).

<u>Unit</u>	<u>Thickness (est. feet)</u>
Washita Group	
Buda Fm.	60
Grayson (Del Rio) Fm.	45
Georgetown Fm.	20
Upper Edwards Fm.	170
Kiamichi Fm.	15
Fredericksburg Group	
Lower Edwards Fm.	290
Walnut Fm.	30
Trinity Group	
Glen Rose Fm.	960
Pearsall Fm.	175
Coahuila Series	
Sligo Fm.	300
Hosston Fm.	330

Section 11: Woodward No. 1, Nelson, southern Travis Co., Texas (Tucker, 1962).

<u>Unit</u>	<u>Thickness (est. feet)</u>
Washita Group	
Buda Fm.	50
Grayson Fm.	60
Georgetown Fm.	50
Upper Edwards Fm.	60
Kiamichi Fm.	40
Fredericksburg Group	
Lower Edwards Fm.	240
Walnut Fm.	90
Trinity Group	
Glen Rose Fm.	870
Pearsall Fm.	185
Coahuila Series	
Sligo Fm.	170
Hosston Fm.	600

Section 12: Mobil No. 1, Kahane, central Lavaca Co., Texas (tucker, 1962).

<u>Unit</u>	<u>Thickness (est. feet)</u>
Washita Group	
Buda, Grayson, Georgetown Fm.'s.	210 ±
Stuart City Reef (undiff.)	1140 +

Section 13: Magnolia No. 1, Doremus, northwest Robertson Co., Texas (Zink, 1957).

<u>Unit</u>	<u>Thickness (est. feet)</u>
Washita Group	
Buda Fm.	90
Grayson Fm.	58
Georgetown Fm.	162
Kiamichi Fm.	120
Fredericksburg Group	
Edwards Fm.	550 ±
Trinity Group	
Glen Rose Fm.	1200 ±
Pearsall Fm.	350 ±
Coahuila Series	
Sligo Fm.	302
Hosston Fm.	?

Section 14: Skelly No. 1, Martin, southeast Houston Co., Texas (Coon, 1956).

<u>Unit</u>	<u>Thickness (est. feet)</u>
Fredericksburg-Washita Groups (undiff.)	1050 ±
Trinity Group	
Paluxy Fm.	340
Glen Rose Fm.	1600 +

Section 15: Composite section, southwest Tarrant Co., Texas modified from Lozo, et al (1959) and Perkins (1960).

<u>Unit</u>	<u>Thickness (est. feet)</u>
Washita Group	
Buda Fm.	1.5 +
Denison Fm.	235
Fort Worth Ls.	20
Duck Creek Fm.	54
Kiamichi Fm.	37
Fredericksburg Group	
Goodland Fm.	125
Walnut Fm.	23
Trinity Group	
Paluxy Fm.	151
Glen Rose Fm.	42 +

Section 16: Raley No. 1, Morris, near Grand Prairie, Texas (Dallas Petroleum Geologists, 1941).

<u>Unit</u>	<u>Thickness (feet)</u>
Fredericksburg-Washita Groups (undiff.)	585 ±
Trinity Group	
Paluxy Fm.	140 ±
Glen Rose Fm.	470 ±
Travis Peak Fm.	440 ±

Section 17: Unidentified Humble well, north-central Smith Co., Texas. Modified from Coon (1956).

<u>Unit</u>	<u>Thickness (est. feet)</u>
Fredericksburg-Washita Groups (undiff.)	2150 ±
Trinity Group	
Paluxy Fm.	800
Glen Rose Fm.	2700
Coahuila Series	
Sligo Fm.	200
Hosston Fm.	1600 ±

Section 18: Unidentified Placid well, east-central Harrison Co., Texas. Modified from Coon (1956).

<u>Unit</u>	<u>Thickness (est. feet)</u>
Fredericksburg-Washita Groups (undiff.)	250 ±
Trinity Group	
Paluxy Fm.	390
Glen Rose Fm.	2600
Coahuila Series	
Sligo Fm.	390
Hosston Fm.	2100 ±

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