Claiborne group
Weches fm.

Right bank of Colorado River, east of new highway bridge at Smithville. (For measured section by Stenzel, see GSA. Guidebook to Excursions, p.68; map location, p.69, Stop 15.) 1940

11-T-2
(Bastrop County)

Type locality for--

Textularia smithvillensis Cushman & Ellisor (C.C., vol.9, p.95, pl.10, fig.10, 1933)
Sigmoidella plummerae Cushman & Ozawa (Proc. U.S. Nat. Mus., vol.77, art.6, p.142, pl.39, fig.3, 1930)
Siphonides biserialis Feray (J.P., vol.15, pp.174, 175, text.figs.1-4, 1941)
Cytherelloides bastropensis Howe (J.P., vol.8, p.31, pl.5, fig.12, 1934)
Cytherelloides smithvillensis Howe (Idem, p.30, pl.5, fig.3)
Cythereis smithvillensis Sutton & Williams (J.P., vol.13, p.564, pl.63, figs.18-20, 1939)
Cythereis spinosa Sutton & Williams (Idem, p.563, pl.63, figs.1-4). C. wechesensis, n. name, J.P., vol.14, p.163, 1940.
Cythereis splendens Sutton & Williams (J.P., vol.13, p.563, pl.63, figs.12-14, 1939)
Cythereis fragillissima Sutton & Williams (Idem, p.565, pl.63, figs. 21,22)
Cythereis sinuata Sutton & Williams (Idem, p.565, pl.63, figs.15-17)
Cythereis? elongata Sutton & Williams (Idem, p.565, pl.64, figs.31-33)
Cythereis linospinosa Sutton & Williams (Idem, p.566, pl.63, figs.5,6)
Cythereis quinquespinosa Sutton & Williams (Idem, p.566, pl.63, figs.10,11)
Cytherella fimbricinctus Sutton & Williams (Idem, p.562, pl.64, figs.14,15)
Pyricythereis foveovalva Sutton & Williams (Idem, p.567, pl.64, figs.29,30)

(OVER)

(Plummer Sta.530)

Pyricythereis delicata Sutton & Williams (J.P., vol.13, p.568, pl.64, figs.5-7, 1939)
Pyricythereis smithvillensis Sutton & Williams (Idem, p.568, pl.64, figs.16-19)
= Cythereis suttoni Stephenson, 1946
Pyricythereis subtriangularis Sutton & Williams (Idem, p.569, pl.64, figs.11-13)
Cytheridea (Haplocytheridea) subovata Sutton & Williams (Idem, p.569, pl.64, figs.26-28)
= C. (H.) bastropensis Sutton & Williams, new name, J.P., vol.14, p.163, 1940.
Cytheridea (Haplocytheridea) habropapillosa Sutton & Williams (Idem, p.570, pl.64, figs.20-22)
Cytheridea (Haplocytheridea) subpyriformis Sutton & Williams (Idem, p.571, pl.64, figs.1-4.)
Cytheridea (Phractocytheridea) compressa Sutton & Williams, SUBGENOTYPE (Idem, p.572, pl.64, figs.23-25)
Cytheropteron minutum Sutton & Williams (Idem, p.573, pl.64, figs.8-10)
Argilloecia claibornensis Stephenson (J.P. vol.20, p.310, pl.43, figs.3, 1946)
Bythocypris parva Stephenson (Idem, p.310, pl.43, fig.2)
Cytheromorpha eocenica Stephenson (Idem, p.311, pl.43, figs.9)
Cytherideis viescana Stephenson (Idem, p.311, pl.43, figs.12)
Monoceratina harrisi Stephenson (Idem p.313, pl.43, fig.14)
Monoceratina laevis Stephenson (Idem, p.313, pl.43, fig.20, pl.44, fig.3)
Monoceratina musei Stephenson (Idem, p.313, pl.43, fig.17)
Monoceratina paucipunctata Stephenson (Idem, p.314, pl.43, fig.15)
Monoceratina williamsi Stephenson (Idem, p.314, pl.43, fig.18)
Eucythere pyramida Stephenson (Idem, p.314, pl.43, fig.10, pl.44, fig.4)

(concluded on card #2)

Claiborne gr. (Card #2) 11-T-2
Weches fm. (Bastrop County)

Type locality for--

Cytherura bastropensis Stephenson (J.P., vol.20, p.317, pl.43, fig.7, 1946)
Cytherura deusseni Stephenson (Idem, p.317, pl.43, fig.6)
Cytherura smithvillensis Stephenson (Idem, p.317, pl.43, fig.11)
Cytherura washburni Stephenson (Idem, p.317, pl.43, fig.5)
Cytheropteron wechesensis Stephenson (Idem, p.318, pl.43, fig.8)
Paracytheridea palmerae Stephenson (Idem, p.319, pl.42, fig.14, pl.44, fig.19)
Cytheretta tyusensis Stephenson (Idem, p.320, pl.42, fig.30, pl.44, fig.20)
Xestoleberis dumblei Stephenson (Idem, p.320, pl.43, fig.16)
Haplocytheridea ellisi Stephenson (Idem, p.322, pl.42, fig.21)
Haplocytheridea nowatnyi Stephenson (Idem, p.324, pl.42, fig.26)
Haplocytheridea stuckeyi Stephenson (Idem, p.324, pl.42, fig.31, pl.44, figs.7,8)
Brachycythere hadleyi Stephenson (Idem, p.333, pl.44, fig.23, pl.45, fig.23)
Cythereis bastropensis Stephenson (Idem, p.334, pl.45, fig.13)
Cythereis stenzeli Stephenson (Idem, p.340, pl.45, fig.5)
Cythereis suttoni Stephenson (Idem, p.340, pl.45, fig.7), new name
Cythereis therrillensis Stephenson (Idem, p.341, pl.45, fig.21)
Cythereis viescana Stephenson (Idem, p.342, pl.44, fig.2, pl.45, fig.11)
Pyricythereis howei Stephenson (Idem, p.330, pl.42, figs.16,17)
Cytheridea (Clithrocytheridea) smithvillensis Stephenson (J.P., vol.6, p.113, pl.18, fig.2, 1942)
Cytheridea (Clithrocytheridea) subpyriformis var. wechensis Stephenson (J.P., vol.6, p.113, pl.18, fig.14, 1942)

Claiborne gr.
Reklaw fm.
Marquez shale

Banks of Ridge Creek, about a mile above the Katy RR. trestle, 6.2 mi. west of Smithville or 0.8 mile east of Upton.

11-T-7
(Bastrop County)

Type locality for--

× Cythereis reklawensis Stephenson, (J.P., vol.18, p.451, pl.76, fig.14, 1944)
× Cythereis uptonensis Stephenson, J.P., vol.18, p.451, pl.76, fig.9, 1944
× Cythereis washburni Stephenson, J.P., vol.18, p.452, pl.76, fig.8, 1944
× Pyricythereis seminuda Stpphenson, J.P., vol.18, p.453, pl.76, figs.5,6, '44
× Eucytherura claibornensis Stephenson, J.P., vol.18, p.453, pl.76, fig.16, '44
× Cytheridea (Haplocytheridea) Stenzeli Stephenson, J.P., vol.16, p.482, text figs. 1-3, 1942

11-T-13
(Bastrop County)

Midway group
Wills Point fm.

Sta. 11–T–3. Midway-Wilcox contact in right bank of Solomon's Creek about one-quarter of a mile east of its junction with Wilbarger Creek[3] and about 1 mile west-southwest of Lawrence Solomon's house, which lies on the west side of the Elgin-Utley road, 5.8 miles by road south-southwest of the railroad crossing south of Elgin. Just back of the house the creek valley exposes typical Wilcox strata[4] carrying fossiliferous concretions. By walking down the channel southwestward an excellent section can be followed and measured bed by bed. About .4 of a mile walking distance along the meandering creek bed and abandoned wagon bridge in dilapidated condition spans the narrow gorge, and about 800 feet farther down the creek from the old bridge the loose, thin-bedded to thick-bedded variable strata of the Wilcox formation lie conformably on well-exposed, dark, hard, compact, heavily bedded and homogeneous fossiliferous clay. A large *Dentalium* is common in these layers, and a perfect shell of *Natica reversa* Whitfield was found. The washed concentrate carries the very small gastropod *Ringicula alabamensis* Aldrich, fragments of *Strepsidura heilprini* Aldrich, and a species of *Turbonilla*, that is common in upper Midway strata. Of the microfossils, ostracods are common, shark teeth rare, otoliths frequent, and well-developed tests of *Ammobaculites midwayensis* n. sp. and *A. expansus* n. sp., for both of which this outcrop is the type locality, are common.

(Sta.13, not 3, Univ.Texas Bull.3201
p.60, 1932)

Type locality for--

x **Ammobaculites midwayensis** Plummer, Univ. Texas Bull. 3201., p.63, pl.5, figs.7-11, 1932.

x **Ammobaculites expansus** Plummer, Idem, p. 65, pl.5, figs. 4-6.

[3]On the Bastrop quadrangle the outcrop lies on the small unnamed creek (generally known as Solomon's Creek) between the *r* and the *g* of the name "Wilbarger" about 4¼ miles north of Rogers Park. The old wagon road is shown crossing the creek just a little northeast of here.

(Plummer Coll. Sta. 12.69)

Type locality for—
Ammobaculites midwayensis Plummer
Ammobaculites expansus Plummer

Midway group
Kincaid fm.

11-T-16
(Bastrop County)

-Excellent exposure in base of high bluff on west side of Colorado River between the Travis-Bastrop county line and the mouth of Dry Creek (Bastrop quadrangle). This dark-green to black, highly fossiliferous, clay marl below a thick covering of terrace and alluvium extends for about 150 feet along the river at moderately high water level. At the time the collection was made, only the upper five feet of the outcrop were exposed, and the samples studied have been restricted to this portion. The clay collected from the upper part of this exposure required long soaking in strong solution of sodium carbonate and some rubbing in the washing process to eliminate the argillaceous content. The final clean residue presents an abundance of foraminiferal tests, shell fragments, and otoliths. The species of foraminifera are mostly those of the upper Midway faunule, though *Truncatulina elevata* is abundant, and specimens of *Marginulina gardnerae* occur rarely. The special interest at this locality is the presence of *Asterigerina primaria*, which is, so far as available literature indicates, the earliest geologic occurrence of this genus, at least in this country. This outcrop lies within the transition zone between the true basal beds and the true upper beds of the formation.

(Sta.67, Univ.Texas Bull.2644, p.59, 1927)

Type locality for--

Cristellaria midwayensis Plummer (Univ.Texas Bull.2644, p.95, pl.13, fig.5, 1927)
Polymorphina cushmani Plummer (syntype)(Idem, p.125, pl.6, fig.9, pl.15, fig.1)
Asterigerina primaria Plummer (Idem, p.157, pl.12, fig.8)
Epistominoides midwayensis Plummer (Am. Midl. Nat., vol.15, p.605, pl.24, fig.4, 1934)

(OVER)

(Plummer Sta.379)

Brachycythere plena Alexander (J.P., vol.8, p.216, pl.33, fig.6, 1934)
Brachycythere interrasilis Alexander (Idem, p.217, pl.33, fig.4)
Cythereis midwayensis Alexander (Idem, p.219, pl.33, fig.1)
Cytheromorpha scrobiculata Alexander (Idem, p.223, pl.32, fig.19)

Midway group
Kincaid fm.

11-T-17
(Bastrop County)

-Ditch along Elgin-Austin road 1.4 miles northeast of Littig close to the county line (Bastrop quadrangle). The yellow, sandy, gypsiferous clay contains fragments of shells and carries an assemblage of typical basal Midway foraminifera. The species *Discorbis newmanae* is abundant, and the type has been chosen from this locality.

(Sta.63, Univ.Texas Bull.2644, p.59, 1927)

Type locality for--

Discorbis newmanae Plummer (Univ. Texas Bull. 2644, p.138, pl.9, fig.4, 1927)

(H. J.P. Coll., No. 405)

Midway group
Kincaid fm.

11-T-18
(Bastrop County)

-About 5¼ miles due south and very slightly west of Littig where the 440-foot contour cuts a northeast-southwest road (Bastrop quadrangle) outcrops a glauconitic sand containing corals and *Venericardia bulla* Dall. The washed residue of this material yields a few species of Midway foraminifera that are not sufficiently distinctive to mark absolutely the position in the formation. As species from the clays at station 66 in the bottom of this same creek just to the north are more indicative of the basal Midway faunule, this glauconitic bed must therefore be regarded as closely associated with that zone. The evidence afforded by the examination of clays just above the *Venericardia bulla* layer at station 64 leads to the conclusion that this fossiliferous horizon divides the basal faunal unit from the upper faunal unit. It must therefore be concluded that this shell bed correlates with the Tehuacana limestone of the Mexia area, with the shell marl in Tehuacana Creek four miles north of Mexia (station 41), and with the transition zone in Hunt and Hopkins counties.

(Sta.65, Univ.Texas Bull.2644, p.59, 1927)

Type locality for--

x **Polymorphina cushmani** Plummer (Univ. Texas Bull. 2644, p.125, pl.6, fig.9, pl.15, fig.1, 1927)

(M.F.P. Coll., Draw. 415)

Type loc. for—
Polymorphina cushmani (Holotype) Plummer

11-T-23

Midway group
Kincaid fm.

Bastrop County)

-In the bottom of the creek about 15 feet below the glauconitic bed of station 65 and about a hundred yards farther north is a shell bed in a matrix of brown, fossiliferous, stiff clay. Midway foraminifera are present, but the species represented are few, and their general character point to deposition in the early Midway sea.

(Sta.66, Univ.Texas Bull.2644, p.59, 1927)

(H. & P. Col., Sta. 416)

Paleocene
Midway group
Kincaid-Wills Pt.

Right bank of Colorado River above mouth of Dry Creek at end of trail leading to river from Caldwell Ranch house, about 1 3/4 miles southeast of the county line. (Deussen's loc. 214, P.P. 126; type locality for several large fossils by Gardner.)

11-T-24
(Bastrop County)

Type locality for--

33-17 ×Cytheropteron (Cytheropteron) midwayensis Alexander, J.P., vol.8, p.230, 1934. Wills Point.

33-16 ×Cytheropteron (Cytheropteron) aligerum Alexander, J.P., vol.8, p.230, 1934. Kincaid

33-14 ×Loxoconcha prava Alexander, J.P., vol.8, p.228, 1934. ~~Wills Point~~ Kincaid

(Plummer & Vas. 725, 726, 727)

Cook Mt. fm.

11-T-29
(Bastrop County)

Shipps Ford on Colorado River, $3^3/4$ miles due east of the Smithville bridge; along abandoned as a ford.

Type locality for--

3-1, 38 . Robertina plummerae Cushman (C.C., vol.14, p.73, 1938)

Midway group
Kincaid fm.

11-T-51
(Bastrop County)

-Gully in west side of small branch of Wilbarger Creek close to the county line about 1¼ miles south-southeast of Littig (Bastrop quadrangle). The fine, yellow, silty, gypsiferous sand containing a few specimens of *Venericardia bulla* yields a generous scattering of basal Midway forms.

(Sta.62, Univ.Texas Bull.2644, p.58, 1927)

(H.P. Coll., Sta. 49)

11-T-52
(Bastrop County)

Midway group
Kincaid fm.

-Gully close to the short northwest-southeast road about 2½ miles S. 25° E. of Littig (Bastrop quadrangle). This compact, siltless, dark-blue clay contains a layer rich in shell fragments and *Venericardia bulla* Dall. The foraminiferal assemblage of the clay above this fossiliferous layer is large and varied and belongs strictly to the upper Midway faunal unit. In the assemblage at this locality occurs *Allomorphina globulosa.*

(Sta.64, Univ.Texas Bull.2644, p.59, 1927)

Type locality for--

Allomorphina globulosa Plummer (Univ. Texas Bull. 2644, p.130, pl.8, fig.4, 1927)

(H. J. P. Coll., Sta. 417)

11-T-53
(Bastrop County)

Midway group
Wills Point fm.

-Roadside cut along the Bastrop-Austin highway about 1½ miles southeast of Elysium (a small settlement shown on the topographic sheet but not known to settlers in the district) and .3 of a mile by road southeast of a small store at the junction of the highway and a secondary northwest-bearing road (almost on the edge of the Austin quadrangle). Here very white, bleached Midway shells lie over the surface of the ground along the side of the road. The clay taken from the bottom of the ditch washes down to a mass of shell fragments, some glauconitic grains, and a little quartz sand. A fair scattering of somewhat mineralized foraminifera that belong to the upper Midway faunule characterize these clays. This location is just south of the creek along which the type specimens of *Venericardia bulla* Dall were collected.

(Sta.68, Univ.Texas Bull.2644, p.60, 1927)

(H.P. Coll., Sta. 381)

11-T-54
(Bastrop County)

Midway group
Wills Point fm.

–Exposure in north bank of Cedar Creek 200 feet west of the bridge 4/4 of a mile southeast of the corner formerly occupied by Williams Store (Austin quadrangle). Compact, very fossiliferous clay at the base of the bank. Typical upper Midway foraminifera are abundant but are somewhat emaciate.

(Sta.69, Univ.Texas Bull.2644, p.60, 1927)

Type locality for —
7-3
1936 Bulimina cacuminata Cushman & Parker (CC. vol.12, p.40, '36)
"3 miles above bridge over Cedar Cr. on Austin-Red Rock Rd."

(H. & P. Coll., Sta. 349)

Midway group
Kincaid fm.

Dry Creek, 3/4* mile above bridge on first road east of Travis-Bastrop county line, Bastrop County, Texas."

11-T-55
(Bastrop County)

Type locality for--

Loxostoma plummerae Cushman (Cush. Lab., Spec. Publ.6, p.59, 1936)

* Letter from Cushman states that the distance should be 3 1/4 (not 3/4) mi.

Midway Group /
Kincaid fm.

Deep ditch on south side of old Austin-Red Rock road about 0.2 of a mile southeast of the Travis-Bastrop county line, or 4 miles southeast of the center of Elroy, or 3.2 miles northwest of the bridge over Cedar Creek. This conspicuous exposure of the Navarro-Kincaid contact has now been destroyed by road grading.

11-T-75
(Bastrop County)

Type locality for--

/ Bulimina cacumenata Cushman and Parker (C.C., vol.12, p.40, pl.7, fig.3, 1936)