

LAND SNAILS FROM THE PLEISTOCENE OF SOUTHERN TEXAS

LESLIE HUBRICHT

3235 - 23rd Ave., Meridian, Mississippi

Of the nine Pleistocene localities reported on here, seven are loess. These contain such northern and mountain species as *Discus cronkhitei*, *Pupilla blandi*, *Cionella lubrica* f. *exigua*, *Vallonia gracilicosta*, and *Pomatiopsis lapidaria* which indicate that the climate was colder and wetter when these deposits were laid down than at present. The other two localities are silt deposits. The Kendall County locality contains no species not found in the region today, and was probably deposited much later than the loess. The Brooks County locality contained large numbers of freshwater shells of northern species such as *Valvata tricarinata* (Say) as well as such southern species as *Lyrodes* sp. The land snail fauna would indicate that the climate was wetter and a little colder than at present. The aquatic species, most of which are species of permanent bodies of water, would also indicate that the climate was much wetter than at present. At present Palo Blanco Creek is a dry wash.

COMAL County: loess, near Guadalupe River, 1.5 miles north of Sattler.

Polygyra texasiana (Moricand)
Polygyra mooreana (W. G. Binney)
Stenotrema leai aliciae (Pilsbry)
Praticolella berlandieriana (Moricand)
Bulimulus mooreanus (Pfeiffer)
Retinella roemeri (Pilsbry & Ferriss)
Hawaiia minuscula (Binney)
Discus cronkhitei (Newcomb)
Helicodiscus eigenmanni Pilsbry

Helicodiscus singleyanus (Pilsbry)
Succinea sp.
Strobilops texasiana Pilsbry & Ferriss
Gastrocopta armifera (Say)
Gastrocopta clappi (Sterki)
Gastrocopta contracta (Say)
Gastrocopta pentodon (Say)
Gastrocopta procera sterkiana Pilsbry
Pupoides albilabris (C. B. Adams)
Pupilla blandi Morse
Cionella lubrica f. *exigua* (Menke)
Vallonia parvula Sterki
Vallonia gracilicosta Reinhardt
Helicina orbiculata tropica Pfeiffer
Pomatiopsis lapidaria (Say)

Gastrocopta armifera and *G. clappi* are commonly found together in central Kentucky and are easily separable. The smaller and more cylindrical shell of *G. clappi* enables one to separate the two forms at a glance. *G. clappi* is undoubtedly specifically distinct from *G. armifera*.

BEXAR County: Loess, near San Antonio River, 5 miles south of San Antonio,
Stenotrema leai aliciae (Pilsbry)
Praticolella berlandieriana (Moricand)
Bulimulus mooreanus pecosensis Pilsbry
 Ferriss
Mesomphix friabilis (W. G. Binney)
Discus cronkhitei (Newcomb)
Gastrocopta armifera (Say)
Helicina orbiculata tropica Pfeiffer

COMAL County, loess, near Guadalupe River, 2.5 miles south of Sattler.

Polygyra texasiana (Moricand)
Polygyra mooreana (W. G. Binney)
Stenotrema leai aliciae (Pilsbry)
Praticolella berlandieriana (Moricand)
Bulimulus mooreanus (Pfeiffer)
Retinella roemeri (Pilsbry & Ferriss)
Retinella indentata paucilirata (Morelet)
Hawaiiia minuscula (Binney)
Helicodiscus eigenmanni Pilsbry
Strobilops texasiana Pilsbry & Ferriss
Gastrocopta armifera (Say)
Gastrocopta contracta (Say)
Cionella lubrica f. *exigua* (Menke)
Helicina orbiculata tropica Pfeiffer

BEXAR County, Loess, near San Antonio River, 5 miles south of San Antonio.

Stenotrema leai aliciae (Pilsbry)
Praticolella berlandieriana (Moricand)
Bulimulus mooreanus pecosensis Pilsbry & Ferriss
Mesomphix friabilis (W. G. Binney)
Discus cronkhitei (Newcomb)
Gastrocopta armifera (Say)
Helicina orbiculata tropica Pfeiffer

KENDALL County, silt, near Guadalupe River, 9 miles north of Boerne.

Polygyra auriformis (Bland)
Polygyra texasiana (Moricand)
Polygyra mooreana (W. G. Binney)
Praticolella berlandieriana (Moricand)
Bulimulus mooreanus (Pfeiffer)
Bulimulus dealbatus (Say)
Retinella roemeri (Pilsbry & Ferriss)
Retinella indentata paucilirata (Morelet)
Hawaiiia minuscula (Binney)
Helicodiscus singleyanus (Pilsbry)
Succinea sp.
Strobilops texasiana Pilsbry & Ferriss
Gastrocopta contracta (Say)
Gastrocopta procera sterkiana Pilsbry
Gastrocopta pellucida hordeacella (Pilsbry)
Pupoides albilabris (C. B. Adams)
Helicina orbiculata tropica Pfeiffer

Bulimulus mooreanus is apparently a recent arrival in Texas. It is found only in the very top layers of the deposits, whereas

B. dealbatus occurs in the lower layers. They were never found mixed.

KERR County, loess, near Johnson Creek, just west of Ingram.

Polygyra mooreana (W. G. Binney)
Stenotrema leai aliciae (Pilsbry)
Praticolella berlandieriana (Moricand)
Retinella roemeri (Pilsbry & Ferriss)
Retinella indentata paucilirata (Morelet)
Hawaiiia minuscula (Binney)
Zonitoides arboreus (Say)
Discus cronkhitei (Newcomb)
Succinea sp.
Strobilops texasiana Pilsbry & Ferriss
Gastrocopta armifera (Say)
Gastrocopta clappi (Sterki)
Gastrocopta contracta (Say)
Gastrocopta procera sterkiana Pilsbry
Pupoides albilabris (C. B. Adams)
Pupilla blandi Morse
Vallonia gracilicosta Reinhardt
Vallonia perspectiva Sterki
Cionella lubrica f. *exigua* (Menke)
Helicina orbiculata tropica Pfeiffer

BANDERA County, loess, 1 mile east of Medina.

Polygyra mooreana (W. G. Binney)
Stenotrema leai aliciae (Pilsbry)
Praticolella berlandieriana (Moricand)
Bulimulus mooreanus (Pfeiffer)
Bulimulus dealbatus (Say)
Retinella roemeri (Pilsbry & Ferriss)
Retinella indentata paucilirata (Morelet)
Zonitoides arboreus (Say)
Discus cronkhitei (Newcomb)
Helicodiscus singleyanus (Pilsbry)
Succinea sp.
Strobilops texasiana Pilsbry & Ferriss
Gastrocopta armifera (Say)
Gastrocopta contracta (Say)
Gastrocopta procera sterkiana Pilsbry
Pupoides albilabris (C. B. Adams)
Cionella lubrica f. *exigua* (Menke)
Vallonia perspectiva Sterki
Helicina orbiculata tropica Pfeiffer

BANDERA County: loess, 3 miles west of Bandera.

Polygyra texasiana (Moricand)
Polygyra mooreana (W. G. Binney)
Bulimulus mooreanus (Pfeiffer)
Succinea sp.
Succinea sp.
Helicina orbiculata tropica Pfeiffer

McMULLEN County: loess, 18 miles south of Tilden.

Polygyra texasiana (Moricand)
Praticolella berlandieriana (Moricand)
Bulimulus alternatus (Say)
Bulimulus dealbatus (Say)
Helicina orbiculata tropica Pfeiffer

BROOKS COUNTY: silt, near Palo Blanco Creek, at Texas 285, 15 miles west of Falfurrias.

Polygyra texasiana (Moricand)
Stenotrema leai aliciae (Pilsbry)
Praticolella pachyloma (Menke)
Bulimulus alternatus (Say)
Bulimulus dealbatus (Say)
Retinella indentata paucilirata (Morelet)
Hawaiiia minuscula (Binney)
Helicodiscus parallelus (Say)
Helicodiscus singleyanus (Pilsbry)
Strobilops texasiana Pilsbry & Ferriss
Gastrocopta contracta (Say)
Gastrocopta tappaniana (C. B. Adams)
Gastrocopta cristata (Pilsbry & Vanatta)
Gastrocopta riograndensis (Pilsbry & Vanatta)
Gastrocopta pellucida hordeacella (Pilsbry)
Pupoides albilabris (C. B. Adams)
Vallonia parvula Sterki
Helicina orbiculata tropica Pfeiffer

LAND SNAILS FROM THE LOESS IN THE VICINITY OF NEW HARMONY, POSEY COUNTY, INDIANA

LESLIE HUBRIGHT

3235 -23rd Ave., Meridian, Mississippi

Charles Frieg Farm, 0.5 mile south of New Harmony. This is a natural exposure on the hillside above the road. It is the type locality for *Pomatiopsis scalaris* F. C. Baker and probably also for *Hendersonia occulta* (Say).

Stenotrema leai (Binney)
Stenotrema barbatum (Clapp)
Nesovitrea electrina (Gould)
Zonitoides arboreus (Say)
Anguispira alternata (Say)
Discus patulus (Deshayes)
Discus cronkhitei (Newcomb)
Helicodiscus parallelus (Say)
Helicodiscus shimeki Hubricht

Catinella gelida (F. C. Baker)
Strobilops labyrinthica (Say)
Gastrocopta armifera (Say)
Vallonia gracilicosta Reinhardt
Hendersonia occulta (Say)
Pomatiopsis scalaris F. C. Baker

Seven-tenths (0.7) mile south of New Harmony. This is a little south of the Frieg Farm locality. Here the top of the hill was removed for fill dirt, exposing a large area of loess.

Stenotrema barbatum (Clapp)
Stenotrema leai (Binney)
Stenotrema fraternum (Say)