ADDITIONAL TYPE SPECIMENS OF FOSSIL INVERTEBRATA IN THE COLLECTIONS OF THE NATURAL HISTORY MUSEUM OF LOS ANGELES COUNTY

By Gale G. Sphon

CONTRIBUTIONS IN SCIENCE

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Editor
ADDITIONAL TYPE SPECIMENS OF FOSSIL INVERTEBRATA
IN THE COLLECTIONS OF THE
NATURAL HISTORY MUSEUM OF LOS ANGELES COUNTY

By Gale G. Sphon

ABSTRACT: This catalogue lists additional type and figured specimens of invertebrate fossils (including paleoentomology) in the collections of the Natural History Museum of Los Angeles County. Each entry includes name, author and date of original publication, bibliographic reference, type category and museum type number, age, formation (if known), and locality; some entries are annotated. The list is arranged phylogenetically from phyla to orders and alphabetically below that level. Species have been listed in their original genera and have been placed in what is currently considered to be the correct family. An index to species is provided.

REVIEW COMMITTEE FOR THIS CONTRIBUTION
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INTRODUCTION

This is the second list of type and figured specimens of invertebrate fossils in the Natural History Museum of Los Angeles County and is published in compliance with article 72D of the International Code of Zoological Nomenclature. The first list (Wilson and Bing, 1970) excluded paleoentomological fossils while the present list includes both insects and subsequent additions from other phyla. These specimens are primarily from the collections of: W. Dwight Pierce; Georg Statz; and the California Institute of Technology, Division of Geological and Planetary Sciences. The first two collections are the property of the museum and the third has been deposited on permanent loan.

The 673 entries in this list are spread among eight phyla and range in age from Devonian through Pleistocene. There are 339 holotypes, 560 syntypes, 2 lectotypes, 529 paratypes, 31 paralectotypes, 2 allotypes (an entomological term for a paratype of the opposite sex of the holotype), 353 figured specimens not in the above categories, and 41 “plastotypes” (casts or copies of type specimens housed in other institutions). Fourteen holotypes, 26 syntypes, 23 paratypes, and 42 figured specimens have not been located and are listed as MISSING. Information about the whereabouts of missing specimens should be communicated to the museum.
The list is arranged phylogenetically by phylum, class, and order and alphabetically by family, genus, and species group names. Each entry includes the genus and species group names of the original author and date of publication, bibliographic reference, type category and The Natural History Museum of Los Angeles County type number, age, formation (if known), and locality. Each specimen is numbered separately with the rare exception of an indeterminable number being present on a rock face, in which case a single number is given the aggregate. Species included in new genera are marked by an asterisk (*).

ACKNOWLEDGEMENTS

I wish to extend my thanks to Dr. Edward C. Wilson for the opportunity to work with this material and my appreciation for the help given me with the project to the museum entomologists Julian Donahue, Roy Snelling, and in particular, Dr. Charles Hodge who helped bring the insect classification up to date. I especially wish to thank Mrs. Gerda MacGregor for her help with the Statz translations and Mrs. Betty Ponti for having had the foresight to have compiled Dr. Pierce's bibliography and a list of his new taxa before his death in 1967.

Phylum PROTOZOA
Class SARCODINA
Order FORAMINIFERIDA
Family DISCOCYCLINIDAE

Actinoecyclina aster
WOODRING, 1930:152, pl. 14, figs. 3-6; pl. 16, figs. 2 and 4; pl. 17, fig. 1. Holotype 4024 (pl. 14, figs. 3 and 5); 4 paratypes 4025 (pl. 14, fig. 6); 4026 (pl. 16, fig. 2); 4027 (pl. 16, fig. 4); all Eocene; W side of Canada de los Sauces, Santa Barbara County, California; 4028 (pl. 17, fig. 1); Eocene; S slope of Jalama Creek, Santa Barbara County, California.

Dioscoecyclina psila
WOODRING, 1930:148, pl. 14, figs. 2, 4-6; pl. 15, figs. 1-4; pl. 17, fig. 1. 15+syntypes 4028 (pl. 17, fig. 1); 4029-4033 (pl. 14, fig. 2); 4034 and 4311 (uncounted number of syntypes; single type numbers assigned to the two lots; pl. 14, figs. 5-6); 4035 (pl. 15, fig. 1); 4036 (pl. 15, fig. 2); 4037 (pl. 15, fig. 3); 4038 (pl. 15, fig. 4); 4039-4042 (unfigured); Eocene; Canada de los Sauces, Santa Barbara County, California.

Family NUMMULITIDAE

Operculina cf. ocalana Cushman, 1921
WOODRING, 1930 as pl. 14, fig. 1.
Figured specimen 4043; Eocene; Canada de los Sauces, Santa Barbara County, California.
Phylum  COLENCERATA
Class  ANTHOZOA
Order  SCLERACTINIA
Family  DENDROPHYLLIIDAE

*Dendrophyllia hannibali*
3 paratypes 4252-4254 (all unfigured); Oligocene, Lincoln Formation; 1½ mi above Porter, Grays Harbor County, Washington.

Phylum  PLATYHELMINTHES
Class  TURBELLARIA

*Gibronea miocenei*
PIERCE, 1964:82, fig. 1-4.
Holotype 2494; Miocene, Barstow Formation; southern Calico Mountains, San Bernardino County, California.

Phylum  ASCHELMINTHES
Class  ROTIFERA

*Pararotifera enigmatica*
PIERCE, 1964:85, figs. 6-7.
Holotype 2496; Miocene, Barstow Formation; southern Calico Mountains, San Bernardino County, California.

Class  NEMATODA
Family  APHELENCHIDAE

*Mioaphelenchus gamagei*
PIERCE, 1964:84, fig. 5.
Holotype 2495; Miocene, Barstow Formation; southern Calico Mountains, San Bernardino County, California.

Phylum  BRACHIPODA
Class  ARTICULATA
Order  TEREBRATULIDA
Family  CRANAEINIDAE

*Maclarenella maculosa*
STEHLI, 1955:869, pl. 87, fig. 1-2, 4-5, 7.
Paratype 4044; Devonian, Waterways Formation; 4-6 mi N of McMurray, Athabaska River, Alberta, Canada.

Family  DIELASMATIDAE

Dielesma sp.
STEHLI, 1955 as pl. 87, figs. 14-19.
4 figured specimens 4255 (fig. 14-15 and 18); 4256 (fig. 16); 4257 (fig. 17); 4258 (fig. 19); Permian; Getaway Member, Cherry Canyon Formation; Guadalupe Mountains, Texas.

Dielesma elongatum (Schlotheim, 1816)
STEHLI, 1956 as pl. 40, fig. B4.
Figured specimen 4045; Permian; Zechstein, near Possneck, Thuringa, Germany.
Fletcherina amygdala (Dana, 1847)
STEHLI, 1961a as pl. 61, fig. 10.
Figured specimen 4046; Permian, Upper Marine Series; Gerringong, New South Wales, Australia.

Fletcherina inversa (de Koninck, 1877)
STEHLI, 1961a as pl. 61, figs. 8-9, 12-13, 16 and 26.
2 figured specimens 4047 (fig. 13); 4312 (figs., 8-9, 12, 16 and 26); Permian, Upper Marine Series; Wyro, near Ulladulla, New South Wales, Australia.

*Lowenstamia texana
STEHLI, 1961b:461, pl. 62, group d, figs. 1-10.
9 syntypes 4048 (figs. 4-5, 8-10); 4049 (figs. 1-3, 6-7); 4050-4056 (unfigured); Permian, Putnam Formation; San Angelo junction, 4 mi SE of Coleman, Coleman County, Texas.

Family HETERELASMINIDAE

Beecheria sp.
STEHLI, 1956, pl. 40, fig. A6.
Figured specimen 4057; Pennsylvanian; Grapevine Canyon, Otero County, New Mexico.

Gilledia cymbaeformis (Morris, 1845)
STEHLI, 1961a as pl. 61, figs. 1-2, 5-6.
Figured specimen 4058; Permian, Upper Marine Series; Wyro, near Ulladulla, New South Wales, Australia.

Family NOTOTHYRIDIDAE

Timorina broili
* Holotype 4060 (fig. 10); 5 paratypes 4061 (figs. 4-5); 4062 (fig. 1); 4063 (fig. 2); 4064 (figs. 3 and 6); 4065 (figs. 7-8); Permian; Basleo, Timor, Dutch East Indies.
NOTE: I am unable to match figs. 9 and 11 with the specimens.

Phylum MOLLUSCA
Class PELECYPODA
Order CONOCARDIDOIDA
Family CONOCARDIIDAE

Conocardium langenheimi
WILSON, 1970:1, fig. 8.
Figured paratype 2443; Lower Permian, McCloud Limestone; Shasta County, California.

Order HIPPURITOIDA
Family CAPRINIDAE

*Coralliochama orcutti
WHITE, 1885:10.
7 plastosytotypes 4302-4308; Cretaceous, Rosario Formation; north side of Punta Banda, "shore of Todos Santos Bay," Baja California, Mexico.
Order NUCULOIDA
Family NUCULIDAE

Acila (Truncacila) demessa Finlay, 1927
SCHENCK, 1943 as pl. 9, figs. 1, 3 and 7.
3 figured specimens 4066 (fig. 1); 4067 (fig. 3); 4068 (fig. 7); Cretaceous, Santa Ana Mountains, Orange County, California.

Order ARCOIDA
Family ARCIDAE

Anadara (Anadara) carrizoensis
REINHART, 1943:56, pl. 5, figs. 1, 4 and 10.
Holotype 4069 (pl. 5, fig. 10); paratype 4070 (pl. 5, figs. 1 and 4); Pliocene, Imperial Formation; south slope of Carrizo Mountain, Imperial County, California.

Anadara aff. A. (Anadara) montereyana (Osmont, 1905)
STANTON, 1966 as pl. 5, fig. 1.
Figured specimen 4071; Miocene, Castaic Formation; bottom of small canyon tributary to Haskell Canyon, Los Angeles County, California.

Arca (Arca) santamariensis
REINHART, 1937:183, pl. 28, figs. 4-5, 7-8 and 11.
REINHART, 1943 as pl. 3, figs. 7-11.
Holotype 4072; Pliocene; Fugler Point, 7½ mi SE of Santa Maria, Santa Barbara County, California.

Arca (Arca) siscoensis
REINHART, 1937:182, pl. 28, figs. 1-3.
REINHART, 1943 as pl. 2, fig. 8.
Holotype 4073; Pliocene; Fugler Point, 7½ mi SE of Santa Maria, Santa Barbara County, California.

Arca vancouverensis
MEEK, 1864:40.
Plastoparatype 4074; Cretaceous; Nanaimo, Vancouver Island, British Columbia, Canada.

Barbatia (Fugleria) pseudoillota
REINHART, 1937:184, pl. 28, figs. 6, 9 and 10.
REINHART, 1943 as pl. 3, figs. 4-6.
Holotype 4075; paratype 4076 (unfigured); Pliocene; Fugler Point, 7½ mi SE of Santa Maria, Santa Barbara County, California.

Family GLYCYMERIDIDAE

Glycymeris ef. G. gigantea (Reeve, 1843)
STANTON, 1966 as pl. 5, figs. 2-3.
2 figured specimens 4077 (fig. 2); 4259 (fig. 3); Miocene, Castaic Formation; tributary to Elderberry Canyon, Los Angeles County, California.

Glycymeris meganosensis Clark and Woodford, 1927
SMITH, 1945 as fig. 6.
Figured specimen 4078; Eocene, Meganos Formation; Mount Diablo Quadrangle, Contra Costa County, California.
Glycymeris veatchii (Gabb, 1864)
SMITH, 1945 as figs. 1 and 9.
2 figured specimens 4079 (fig. 1); Cretaceous; Tuscan Springs, Tehama County, California; 4080 (fig. 9); Cretaceous; Santa Monica Mountains, Los Angeles County, California.

Glycymeris veatchii anae
SMITH, 1945:42, figs. 3 and 7.
2 syntypes 4081 (fig. 3); 4082 (fig. 7); Cretaceous; Santa Ana Mountains, Orange County, California.

Glycymeris veatchii major (Stanton, 1896)
SMITH, 1945 as figs. 5 and 8.
2 figured specimens 4083 (fig. 5); Eocene, “Martinez” Formation; Simi Valley, Ventura County, California; 4084 (fig. 8); Cretaceous, Garzas Formation; Garzas Creek, Merced County, California.

Glycymeris veatchii reddingensis
SMITH, 1945:42, figs. 2 and 4.
2 syntypes 4085 (fig. 2); Cretaceous; near Redding, Shasta County, California.

Family LIMOPSIDAE

Trinacria cor
POPENOE, 1937:380.
Plastoholotype 4087; Plastoparatype 4088; Cretaceous, Williams Formation; Santa Ana Mountains, Orange County, California.

Order MYTILOIDA
Family MYTILIDAE

Brachidontes bicornis
POPENOE, 1937:383.
Plastoholotype 4089; Cretaceous, Williams Formation; Santa Ana Mountains, Orange County, California.

Inoperena bellarugosa
POPENOE, 1937:382.
Plastoholotype 4090; Plastoparatype 4091; Cretaceous, Ladd Formation; Santa Ana Mountains, Orange County, California.

Order PTERIOIDAE
Family ANOMIIDAE

Pododesmus cf. P. macroschisma (Deshayes, 1839)
STANTON, 1966 as pl. 5 fig. 7.
Figured specimen 4092; Miocene, Castaic Formation; Small valley E of Dry Canyon Dam, Los Angeles County, California.

Family LIMIDAE

Lima (Acesta) beta
POPENOE, 1937:382.
Plastoholotype 4093; Cretaceous, Ladd Formation; Santa Ana Mountains, Orange County, California.
Family PECTINIDAE

Chlamys hodgei (Hertlein, 1925)
STANTON, 1966 as pl. 5, figs. 4-5.
Figured specimen 4094; Miocene, Castaic Formation; Humphreys Quadrangle, Los Angeles County, California.

Hinnites multirugosus var. crassiplicatus (Gale, 1928)
STANTON, 1966 as pl. 5, fig. 6.
Figured specimen 4095; Miocene, Castaic Formation; Humphreys Quadrangle, Los Angeles County, California.

Pecten (Amusium) condoni
HERTLEIN, 1925b:41.
Paratype 4260 (unfigured); Miocene, Montesano Formation; at dam #35, W Wishkah River, Grays Harbor County, Washington.

Pecten (Propeanusium) cowperi
WARING, 1917:63.
Paratype 4096 (unfigured); Cretaceous, Chico Formation; Bells Canyon, Ventura County, California.

Pecten (Plagiotectium) cristobalensis
HERTLEIN, 1925a:19.
Paratype 4097 (unfigured); Pliocene, Salada Formation; 3 mi SE of Turtle Bay, Baja California, Mexico.

Pecten (Plagiotectium) hakei
HERTLEIN, 1925a:18.
Paratype 4098 (unfigured); Pliocene, Salada Formation; 5 mi N of Abreojos Point, Ballenas Bay Quadrangle, Baja California, Mexico.

Pecten (Campionectes) harfordus
DAVIS, 1913:456.
Paratype 4099 (unfigured); “Jurassic”; 6 mi N of Port Hartford, San Luis Obispo County, California.

Pecten (Aequipecten) percarus
HERTLEIN, 1925a:13.
Paratype 4100 (unfigured); Pliocene, Salada Formation; mouth of large arroyo NE of Elephant Mesa, Scammon’s Lagoon Quadrangle, Baja California, Mexico.

Pecten stearnsii Dall, 1878
WOODRING, BRAMLETTE, and KEW, 1946 as pl. 30, figs. 9-10.
Figured specimen 4101; Pleistocene, Lomita Marl; Hilltop Quarry, San Pedro, Los Angeles County, California.

Family SPONDYLIDAE

Spondylus sp.
STANTON, 1966 as pl. 5, fig. 8.
Figured specimen 4102; Miocene, Castaic Formation; E of junction of Castaic and Fish Creeks, Los Angeles County, California.

Order VENEROIDA
Family ASTARTIDAE

Astarte concentrica Conrad, 1834
POPENOE and FINDLAY, 1933 as pl. 19, figs. 5-7.
3 figured specimens 4103 (fig. 5); 4104 (fig. 6); 4105 (fig. 7); Miocene, Yorktown Formation; Grove Wharf, James City County, Virginia.
Family CARDITIDAE

*Venericardia parva* Lea, 1833

POPENOYE and FINDLAY, 1933 as pl. 19, figs. 1-4 and 8-9.
6 figured specimens 4106 (fig. 1); 4107 (fig. 2); 4108 (fig. 3); 4109 (fig. 4); 4110 (fig. 8); 4111 (fig. 9); Eocene; Clairborne Bluff, Monroe County, Alabama.

*"Venericardia" ventricosa* (Gould, 1850)

POPENOYE and FINDLAY, 1933 as pl. 19, fig. 17.
Figured specimen 4112; Pleistocene; San Pedro, Los Angeles County, California.

Family CRASSATELLIDAE

*Crasatella gamma*

POPENOYE, 1937:388.
Plastoholotype 4113; 2 plastoparatypes 4114 and 4115; Cretaceous, Ladd Formation; Santa Ana Mountains, Orange County, California.

*Crasatella granti* (Wiedey, 1928)

WOODRING, 1942 as pl. 13, fig. 1.
Figured specimen 4116; Miocene, Vaqueros Formation; Cajon Pass, San Bernardino County, California.

*Craassinella nuculiformis*

BERRY, 1940:149.
Paratype 4117; Pleistocene; W side of Gaffey Street in cut just below General St., San Pedro, Los Angeles County, California.

*Eucrasatella subgibbosa* (Hanna, 1926)

STANTON, 1966 as pl. 5, figs. 9-12.
4 figured specimens 4118 (fig. 9); 4119 (fig. 10); 4120 (fig. 11); 4121 (fig. 12); Miocene, Castaic Formation; Humphreys Quadrangle, Los Angeles County, California.

Family ISOCARDIIDAE

*Clisocolus corrugatus*

POPENOYE, 1937:390.
Plastoholotype 4122; Cretaceous, Ladd Formation; Santa Ana Mountains, Orange County, California.

*Isocardia delta*

POPENOYE, 1937:389.
Plastoholotype 4123; 2 plastoparatypes 4124-4125; Cretaceous, Ladd Formation; Santa Ana Mountains, Orange County, California.

Family PSAMMOBIIDAE

*Sanguinoloria* cf. *S. nuttalli* Conrad, 1837

STANTON, 1966 as pl. 6, figs. 3-4.
Figured specimens 4126; Miocene, Castaic Formation; NE side of Castaic Canyon, Los Angeles County, California.

Family TELLINIDAE

*Macoma* ? sp.

STANTON, 1966 as pl. 6, figs. 6-7.
2 figured specimens 4127 (fig. 6); 4128 (fig. 7); Miocene, Castaic Formation; W bank at junction of Castaic and Elizabeth Lake Canyons, Los Angeles County, California.
Psammobrachys (Florimetis) biangulata (Carpenter, 1855)
STANTON, 1966 as pl. 6, fig. 5.
Figured specimen 4129; Miocene, Castaic Formation; NE side of Castaic Canyon, Los Angeles County, California.

Family VENERIDAE

*Calva regina
2 plastosyntypes 4130-4131; Cretaceous, Ladd Formation; Santa Ana Mountains, Orange County, California.

Cyprideria moorei
POPENOE, 1937:391.
4 plastosyntypes 4132-4135; Cretaceous, Ladd Formation; Santa Ana Mountains, Orange County, California.

Dosinia sp.
STANTON, 1966 as pl. 5, figs. 13-14.
2 figured specimens 4136 (fig. 13); 4137 (fig. 14); Miocene, Castaic Formation; NE side of Castaic Canyon, Los Angeles County, California.

Flaventia zeta
POPENOE, 1937:393.
Plastoholotype 4138; 2 platsoparatypes 4139-4140; Cretaceous, Ladd Formation; Santa Ana Mountains, Orange County, California.

Macrocallista stantonii
WARING, 1971:77.
Paratype 4141 (unfigured); Eocene, "Martinez" Formation; Simi Hills, Ventura County, California.

Mercenaria perlaminosa (Conrad, 1855)
WOODRING, BRAMLETTE and KEW, 1946 as pl. 31, figs. 16-17.
Figured specimen 4142; Pleistocene, Lomita Marl; San Pedro, Los Angeles County, California.

Pitar (Lamelliconcha) sp.
STANTON, 1966 as pl. 6, figs. 1-2.
Figured specimen 4143; Miocene, Castaic Formation; Humphreys Quadrangle, Los Angeles County, California.

Tivela gastonensis
CLARK, 1925:93.
Paratype 4144 (unfigured); Oligocene; Scroggins Cañon, Gaston, Washington County, Oregon.

Tivela scarificata
BERRY, 1940:5.
2 paratypes 4145-4146 (unfigured); Pleistocene; NW corner of Beacon and 2nd Sts., San Pedro, Los Angeles County, California.

Order MYOIDA
Family HIATELLIDAE

Panomya heringianus Dall, 1916
WOODRING, BRAMLETTE and KEW, 1946 as pl. 33, fig. 13.
Figured specimen 4147; Pleistocene, Timms Point Silt; Timms Point, San Pedro, Los Angeles County, California.
Order PHOLADOMYOIDA
Family PANDORIDAE

Pandora grandis Dall, 1877
WOODRING, BRAMLETTE and KEW, 1946 as pl. 33, fig. 18.
Figured specimen 4148; Pleistocene, Timms Point Silt; Timms Point, San Pedro, Los Angeles County, California.

Family PERIPLOMATIDAE

Periploma cf. P. discus Stearns, 1890
STANTON, 1966 as pl. 6, figs. 8-9.
Figured specimen 4149; Miocene, Castaic Formation; Bottom of small canyon tributary to Haskell Canyon, Los Angeles County, California.

Family THRACIIDAE

Thracia trapezoides Conrad, 1849
WOODRING, BRAMLETTE and KEW, 1946 as pl. 33, fig. 15.
Figured specimen 4150; Pleistocene, Timms Point Silt; Timms Point, San Pedro, Los Angeles County, California.

Class GASTROPODA
Order ARCHAEOGASTROPODA
Family ACMAEIDAE

Acmaea lepisma
BERRY, 1940:155.
4 paratypes 4151-4154 (all unfigured); Pleistocene; Hilltop Quarry, San Pedro, Los Angeles County, California.

Family HALIOTIDAE

Haliotis lomaensis
ANDERSON, 1902:75.
Plastoholotype 4155; Cretaceous; Point Loma, San Diego, San Diego County, California.

Haliotis palaea
WOODRING, 1931:38, pl. 6, figs. 1-3.
Holotype 4156 (fig. 1); paratype 4157 (fig. 2); Miocene; Brown Canyon, Santa Monica Mountains, Los Angeles County, California.

Family LIOTIIDAE

Liotia carinata Carpenter, 1857
STANTON, 1966 as pl. 6, figs. 15-16.
Figured specimen 4158; Miocene, Castaic Formation; Humphreys Quadrangle, Los Angeles County, California.

Family NERITIDAE

Nerita sp.
STANTON, 1966 as pl. 6, figs. 13-14.
Figured specimen 4159; Miocene, Castaic Formation; NE bank of Castaic Canyon, Los Angeles County, California.
Family TROCHIDAE

Lirularia magna
T. S. OLDROYD, 1925:36.
9 paratypes 2460-2468 (unfigured); Pleistocene; San Pedro, Los Angeles County, California.

Turricula imperialis brevis Stewart in Woodring, Stewart and Richards, 1941.
WOODRING and BRAMLETTE, 1950 as pl. 12, figs. 12 and 14.
Figured specimen 4160; Pliocene, Careaga sandstone; Fugler Point, Santa Barbara County, California.

Turricula santacruzaana
ARNOLD, 1908:373.
Paratype 4161 (unfigured); Oligocene, San Lorenzo Formation; San Lorenzo River, 3 mi above Boulder Creek, Santa Cruz County, California.

Family TURBINIDAE

Astraea (Pomaulax) cf. A. (Pomaulax) graduta Grant and Gale, 1931
STANTON, 1966 as pl. 6, figs. 10-12.
2 figured specimens; 4162 (figs. 10-11) Miocene, Castaic Formation; Crest of ridge SE of Elderberry Canyon, Los Angeles County, California; 4163 (fig. 12) Miocene, Castaic Formation; Humphreys Quadrangle, Los Angeles County, California.

Astraea (Pomaulax) petrothama
BERRY, 1940:156.
2 paratypes 4164-4165 (unfigured); Pleistocene; Hilltop Quarry, San Pedro, Los Angeles County, California.

Homalopoma cf. H. paucicostata (Dall, 1871)
WOODRING and BRAMLETTE, 1950 as pl. 12, fig. 4.
Figured specimen 4166; Pliocene, Careaga sandstone; Fugler Point, Santa Barbara County, California.

Leptothyra subobsoleta
WILLET, 1937:63, pl. 25.
9 paratypes 2471-2479; Pleistocene, Timms Point Silt; Timms Point, San Pedro, Los Angeles County, California.
NOTE: The holotype, but no paratypes, was reported in Wilson and Bing (1970:7).

Order MESOGASTROPODA
Family CALYPTRAEIDAE

Crepidula princeps Conrad, 1856
WOODRING, BRAMLETTE and KEW, 1946 as pl. 32, figs. 5-6.
Figured specimen 4167; Pleistocene, Timms Point Silt; Timms Point, San Pedro, Los Angeles County, California.

Trochita cf. T. trochiformis (Born, 1778)
STANTON, 1966 as pl. 7, fig. 8.
Figured specimen 4168; Miocene, Castaic Formation; Humphreys Quadrangle, Los Angeles County, California.

Family CERITHIIDAE

?Bittium arnoldi Bartsch, 1911
STANTON, 1966 as pl. 6, fig. 17.
Figured specimen 4169; Miocene, Castaic Formation; W side of northerly trending tributary to Elizabeth Lake Canyon, Los Angeles County, California.
Family **IFICIDAE**

*Ficus (Trophosycon) ocyana* (Conrad, 1855)
STANTON, 1966 as pl. 7, figs. 9-10.
2 figured specimens; 4170 (fig. 9); Miocene, Castaic Formation; W side of northerly trending tributary to Elizabeth Lake Canyon, Los Angeles County, California; 4171 (fig. 10); Miocene, Castaic Formation, Humphreys Quadrangle, Los Angeles County, California.

**Family NATICIDAE**

*Ampullina packardi*
POPENOE, 1937:399.
Plastoholotype 4172; Cretaceous, Ladd Formation; Santa Ana Mountains, Orange County, California.

**Family TURRITELLIDAE**

*Turritella andersoni mulleri*
MERRIAM, 1941:90.
3 paratypes 4173-4175 (all unfigured); Eocene; Mount Pinos Quadrangle, Ventura County, California.

*Turritella cooperi* Carpenter, 1864
STANTON, 1966 as pl. 7, figs. 1-5.
5 figured specimens 4176 (fig. 1); 4177 (fig. 2); 4178 (fig. 3); 4179 (fig. 4); 4180 (fig. 5); Miocene, Castaic Formation; On ridge W of junction of Reynier and Sand Canyons, Los Angeles County, California.

*Turritella aff. T. freya* Nomland, 1917
STANTON, 1966 as pl. 7, figs. 6-7.
2 figured specimens 4181 (fig. 6); 4182 (fig. 7); Miocene, Castaic Formation; on ridge W of junction of Reynier and Sand Canyon, Los Angeles County, California.

*Turritella inezana* Conrad, 1857
WOODRING, 1942 as pl. 13, figs. 3-4 and pl. 14, fig. 3.
3 figured specimens 4183 (pl. 13, fig. 3); 4184 (pl. 13, fig. 4); 4185 (pl. 14, fig. 3); Miocene; Cajon Pass, San Bernardino County, California.

*Turritella iota*
POPENOE, 1937:401.
Plastoholotype 4186; Cretaceous, Ladd Formation; Santa Ana Mountains, Orange County, California.

*Turritella ocyana var. topangaensis*
MERRIAM, 1941:115.
Plastoparatype 4187; Miocene, Topanga Formation; La Panza Mountains, San Luis Obispo County, California.

*Turritella ossa*
POPENOE, 1937:401.
Plastoholotype 4188; 2 plastoparatypes 4189-4190; Cretaceous, Ladd Formation; Santa Ana Mountains, Orange County, California.

*Turritella uvasana subsp. infera*
MERRIAM, 1941:90.
Plastoparatype 4191; Eocene, Santa Susana Formation; Simi Valley, Ventura County, California.
Turritella uvasana subsp. stewarti
MERRIAM, 1941:95.
Plastoparatype 4192; Eocene, Cowlitz Formation; Coal Creek, Cowlitz County, Washington.

Family VIVIPARIDAE

Viviparus washingtonianus
ARNOLD and HANNIBAL in HANNIBAL, 1912:194.
Paratype 4193 (unfigured); Eocene; Olequa Creek, 2 mi N of Little Falls, Washington.

Order NEOGASTROPODA
Family BUCCINIDAE

Calicanthus fortis var. cf. angulata (Arnold, 1907)
WOODRING and BRAMLETTE, 1950 as pl. 14, fig. 10.
Figured specimen 4194; Pliocene, Careaga sandstone; Fugler Point, Santa Barbara County, California.

Gyrineum lewisi
CARSON, 1926:54.
Paratype 4195 (unfigured); Lower Pliocene; Fugler's Point, Santa Maria District, Santa Barbara County, California.

Family FASCIOLARIDAE

Liophus ashleyi
ARNOLD, 1908:372.
Paratype 4196 (unfigured); Oligocene, San Lorenzo Formation; 3 mi above Boulder Creek, Santa Cruz County, California.

Family MARGINELLIDAE

Marginella cf. M. albuminosa Dall, 1919
STANTON, 1966 as pl. 7, figs. 14-15.
Figured specimen 4197; Miocene, Castaic Formation; Humphreys Quadrangle, Los Angeles County, California.

Family MURIDAE

Jatont cf. J. carperteri (Dall, 1899)
WOODRING and BRAMLETTE, 1950 as pl. 15, figs. 9 and 11.
Figured specimen 4198; Pliocene, Careaga sandstone; Fugler Point, Santa Barbara County, California.

Family NEPTUNIDAE

Kelletia kanakoffi
HERTLEIN, 1970:3, figs. 1-3.
Holotype 2456 (figs. 1-2); paratype 2457 (fig. 3); Pleistocene, Lomita Marl; San Pedro, Los Angeles County, California.

Family OLLIVIDAE

Oliva spicata (Röding, 1798)
STANTON, 1966 as pl. 7, fig. 13.
Figured specimen 4199; Miocene, Castaic Formation; W of Haskell Canyon, Los Angeles County, California.
Family THAIDIDAE

_Thais (Nucella) shumanensis_
CARSON, 1926:56.
Paratype 4200 (unfigured); Pliocene, Fernando Formation; ½ mi N of Schuman, Santa Barbara County, California.

Family TURRIDAE

_Anomalosiphon_ sp.
STANTON, 1966 as pl. 7, figs. 11-12.
2 figured specimens 4201 (fig. 11); 4202 (fig. 12); Miocene, Castaic Formation; Bottom of small canyon tributary to Haskell Canyon, Los Angeles County, California.

_Antiplanes_ sp.
STANTON, 1966 as pl. 7, fig. 16.
Figured specimen 4203; Miocene, Castaic Formation; On ridge W of junction of Reynier and Sand Canyons, Los Angeles County, California.

_Clathurella (Glyphostoma) tridensia_
BERRY, 1941:8.
3 paratypes 4204-4206 (all unfigured); Pleistocene; Hilltop Quarry, San Pedro, Los Angeles County, California.

_Mitromorpha barbarensis woodfordi_
BERRY, 1941:10.
2 paratypes 4207-4208 (both unfigured); Pleistocene; Hilltop Quarry, San Pedro, Los Angeles County, California.

_Mitromorpha galeana_
BERRY, 1941:12.
2 paratypes 4209-4210 (both unfigured); Pleistocene; Hilltop Quarry, San Pedro, Los Angeles County, California.

_Moniliopsis chacei_
BERRY, 1941:6.
Paratype 4211 (unfigured); Pleistocene; Hilltop Quarry, San Pedro, Los Angeles County, California.

Family VOLUTIDAE

_Lyria andersoni_
WARING, 1917:97.
Paratype 4212 (unfigured); Eocene, Tejon Formation; McCray Wells, Ventura County, California.

_Psephaea oregensis_ (Dall, 1907)
WOODRING and BRAMLETTE, 1950 as pl. 14, fig. 4-5.
Figured specimen 4213; Pliocene, Careaga Sandstone; Fugler Point, Santa Maria, Santa Barbara County, California.

Order ENTOMOTAENIATA
Family PYRAMIDELLIDAE

_Iselica fenestrata_ (Carpenter, 1864)
WOODRING and BRAMLETTE, 1950 as pl. 13, figs. 17-18.
Figured specimen 4214; Pliocene, Careaga sandstone; Fugler Point, S side of Santa Maria River, Santa Barbara County, California.
Order STYLOMMATOPHORA
Family FRUTICICOLIDAE

*Helminthoglypta* ? stocki
HANNA, 1934:539, figs. 1-3a.
Holotype 4261 (fig. 1); 2 paratypes 4262 (figs. 2, 3, 3a); 4263 (unfigured);
Eocene; N of Simi Valley, Ventura County, California.

Order CEPHALASPIDIA
Family ACTEONIDAE

Acteon cf. *A. boulderana* Etherington, 1931
STANTON, 1966 as pl. 7, fig. 17.
Figured specimen 4215; Miocene, Castaic Formation; NE side of Castaic
Canyon, Los Angeles County, California.

Class SCAPHOPODA
Order SOLENOCONCHA
Family DENTALIIDAE

Dentalium sp.
STANTON, 1966 as pl. 7, fig. 21.
Figured specimen 4216; Miocene, Castaic Formation; N side of small W
trending valley E of Canyon Dam, Los Angeles County, California.

Class CEPHALOPODA
Order AMMONOIDEA
Family NOSTCERATIDAE

*Ainoceras kamuy*
MATSUMOTO and KANIE, 1967:351.
Plastoparatype 4309; Cretaceous; Hattori Ranch, Urakawa, Hidaka Province,
Hokkaido, Japan.

Family PACHYDISCIDAЕ

Pachydiscus seppenradensis
LANDOIS, 1895:99.
Plastosyntype 4310; Cretaceous; Seppenrade, Westphalia, Germany.

Phylum ECHINODERMATA
Class STELLOEIDEA
Order PAXILLOSIDA
Family ASTROPECTINIDAE

Astropecten matilijaensis
DURHAM and ROBERTS, 1948:435, pl. 65, figs. 1-5; pl. 66, figs. 2, 4-5.
Holotype 4217 (Durham and Roberts 1948, pl. 65, figs. 3-4); 29 paratypes
4218 (Durham and Roberts 1948, pl. 65, fig. 1; pl. 66, fig. 4); 4219 (Durham
and Roberts 1948, pl. 65, fig. 2; Durham 1948:28); 4220 (Durham and
Roberts 1948, pl. 65, fig. 5); 4221 (Durham and Roberts 1948, pl. 66, fig. 2);
4222 (Durham and Roberts 1948, pl. 66, fig. 5); 4223 (Durham and Roberts
1948, pl. 65, fig. 3, upper); 4224 (Durham and Roberts 1948, pl. 65, fig. 3,
lower); 4225-4247 (unfigured); Cretaceous, Chico Formation {Eocene, Cozy
Dell Formation}; North fork of Matilija Creek, Ventura County, California.
Order FORCIPULATIDA
Family ECHINASTERIDAE

Henricia (?) venturana
DURHAM and ROBERTS, 1948:437, pl. 66, figs. 1 and 3.
Holotype 4248; Cretaceous, Chico Formation [Eocene, Cozy Dell Formation];
North fork of Matilija Creek, Ventura County, California.

Class ECHINOIDEA
Order CIDAROIDA
Family CIDARIDAE

Cidarid spines
STANTON, 1966 as pl. 7, figs. 18-20.
2 figured specimens 4249 (pl. 7, fig. 18; Miocene, Castaic Formation; Hum-
phreys Quadrangle, Los Angeles County, California) 4250 (pl. 7, figs. 19-20);
Miocene, Castaic Formation; Castaic Creek, N of Cordova Ranch, Los
Angeles County, California.

Order CLYPEASTEROIDA
Family ECHINARACHNIIDAE

Astrodapsis fernandoensis Pack, 1909
STANTON, 1966 as pl. 7, fig. 22.
Figured specimen 4251; Miocene, Castaic Formation; Bottom of small canyon
tributary to Haskell Canyon, Los Angeles County, California.

Phylum ARTHROPODA
Class ARACHNIDA
Order PEDIPALPIDA
Family SCHIZOMIDAE

*Caloschizomus latisternum
PIERCE, 1951a:41, pl. 14, fig. 4; pl. 15, fig. 7.
PETRUNKEVITCH, 1955, fig. 90, la.
Holotype 2505; Tertiary; Bonner Quarry, Kaibab National Forest, Yavapai
County, Arizona.

*Onychothelyphonus bonneri
PIERCE, 1950d:3, pl. 34, fig. 1.
PETRUNKEVITCH, 1955, fig. 90, 1b.
Holotype 2509; Tertiary; Bonner Quarry, Kaibab National Forest, Yavapai
County, Arizona.

Thelyphonus hadleyi
PIERCE, 1945c:7, pl. 5.
Holotype 2504; Middle Miocene; Cabrillo Beach, San Pedro, Los Angeles
County, California.

Order ARANEIDA
Family ARGYRONETIDAE

Argyroneta antiqua Heyden, 1859
FURST, 1959:12, p. 12, pl. and fig. unnumbered.
Figured specimen 3086; Oligocene; Rott, Rheinland, Germany.

Family SALICIDAE

Salticus seymouri
PIERCE, 1950a:3 (unfigured).
5 syntypes 2499-2503; Pleistocene; Seymour River, 8 mi above Vancouver
Channel, British Columbia, Canada.
Class CRUSTACEA
Order CLADOCERA
Family DAPHNIDAE

*Daphnia [sic] fossilis* Heyden
STATZ, 1938b:56, fig. 13.
Figured specimen 3087; Oligocene; Rott, Rheinland, Germany.

Order DECAPODA
Family CANCRIDAE

*Cancer branneri* Rathbun, 1926
MENZIES, 1951:165, figs. 2a-2b.
2 figured specimens 2448 (fig. 2a); 2449 (fig. 2b); Pleistocene, Timm’s Point Formation; San Pedro, Los Angeles County, California.

*Cancer jordani* Rathbun, 1900
MENZIES, 1951:165, figs. 5a-5d.
2 figured specimens 2446 (figs. 5a-5b); 2447 (figs. 5c-5d); Pleistocene; San Pedro, Los Angeles County, California.

*Cancer productus* Randall, 1839
MENZIES, 1951:165, figs. 4a-4d.
2 figured specimens 2444 (figs. 4a-4b) (MISSING); 2445 (figs. 4c-4d) (MISSING); Pleistocene; San Pedro, Los Angeles County, California.

Family PALAEMONIDAE

*Micropalpis papyracea* Meyer, 1859
STATZ, 1938a:29, fig. 12.
Figured specimen 3088; Oligocene; Rott, Rheinland, Germany.

Class DIPOPODA
Order JULIDA
Family PARAJULIDAE

*Parajulus lasti*
PIERCE, 1945a:1, pl. 1.
Holotype 2497; Upper Miocene; Oxnard, Ventura County, California.

*Parajulus onychis*
PIERCE, 1951b:41, pl. 15, figs. 8-9.
Holotype 2498; Tertiary; Bonner Quarry, Kaibab National Forest, Yavapai County, Arizona.

Class INSECTA
Order COLLEMBOLA
Family PALAEOSMINTHURIDAE

*Palaeosminthurus juliae*
PIERCE and GIBRON, 1962:147, fig. 4.
Holotype 2512; Miocene, Barstow Formation; southern Calico Mountains, San Bernardino County, California.

Order DIPLURA
Family CAMPODEIDAE

*Onychocampodea onychis*
PIERCE, 1951c:48, pl. 17, fig. 11.
Holotype 2506; Tertiary; Bonner Quarry, Kaibab National Forest, Yavapai County, Arizona.
Family JAPYGIDAE

*Onychojapyx schmidtii
PIERCE, 1950c:104, pl. 34, fig. 2.
Holotype 2508; Tertiary; Bonner Quarry, Kaibab National Forest, Yavapai County, Arizona.

Family PROJAPYGIDAE

*Plioprojapyx primitivus
PIERCE, 1951c:48, pl. 18, fig. 16.
Holotype 2511; Tertiary; Bonner Quarry, Kaibab National Forest, Yavapai County, Arizona.

Order THYSANURA
Family LEPISMATIDAE

*Onycholepisma arizonae
PIERCE, 1951c:45, pl. 17, fig. 14.
Holotype 2510; Tertiary; Bonner Quarry, Kaibab National Forest, Yavapai County, Arizona.

Family MACHILIDAE

*Onychomachilis fisheri
PIERCE, 1951c:45, pl. 17, figs. 12 and 15.
Holotype 2507 (MISSING); Tertiary, Bonner Quarry, Kaibab National Forest, Yavapai County, Arizona.

Order EPHEMEROPTERA
Family APHELOPHLEBIDAE

*Aphelophlebodes stocki
PIERCE, 1945b:4, pl. 2.
Holotype 2513; Upper Miocene; Puente Hills, SE of Puente, Los Angeles County, California.

Lestes sp.
STATZ, 1938b:58, fig. 16.
Figured specimen 3089; Oligocene; Rott, Rheinland, Germany.

Lestes grandis
STATZ, 1930:11, fig. 1.
Holotype 3090; Oligocene; Rott, Rheinland, Germany.
NOTE: The figured plate is in the Kastenholz collection; the counterplate is in the Natural History Museum of Los Angeles County.

Family COENAGRIONIDAE

*Sobohapteron kirkbyae
PIERCE, 1965:160, fig. 2.
Holotype 2514 (MISSING); Upper Miocene; Woodcrest Drive, Sherman Oaks, Los Angeles County, California.
NOTE: Carpenter (1968) moved this species from the order Protorthoptera where it was originally placed to the present position, order Odonata, family Coenagrionidae.
Family LIBELLULIDAE

?Libellulidae (nymph)
MOUNT, 1971:3, fig. 1.
Figured specimen 3085; Miocene, Altamira shale; Float between Cabrillo
Beach and Point Fermin, San Pedro, Los Angeles County, California.

Cellithemis cellulosa (Hagen, 1863)
STATZ, 1938b:57, fig. 15.
Figured specimen 3091; Oligocene; Rott, Rheinland, Germany.

Libellula ceras Hagen, 1863
STATZ, 1938b:56, fig. 14.
Figured specimen 3092 (MISSING); Oligocene; Rott, Rheinland, Germany.

Order PLECOPTERA
Family LEUCTRIDAE

Leuctra antiqua
STATZ, 1938b:58, fig. 17.
Figured specimen 3093; Oligocene; Rott, Rheinland, Germany.

Family LIPOSCELIDAE

*Miotroctes rousei
PIERCE, 1960:46, pl. 16, fig. 7.
Holotype 2526 (MISSING); Miocene, Barstow Formation; southern Calico
Mountains, San Bernardino County, California.

Order ORTHOPTERA
Family BLATTIDAE

Blaberites rhenana
STATZ, 1939:10, pl. 4, figs. 14-15.
2 syntypes 3094 (fig. 14) and 3095 (fig. 15); Oligocene; Rott, Rheinland,
Germany.

Ectobius glabellus
STATZ, 1939:12, pl. 5, figs. 18-22.
3 syntypes 3096 (figs. 18 and 19), 3097 (figs. 20-21), 3098 (fig. 22); Oligocene;
Rott, Rheinland, Germany.

Nycitibora ? elongata
STATZ, 1939:11, pl. 4, figs. 16-17.
Holotype 3099; Oligocene: Rott, Rheinland, Germany.

Family EXAERETOPTERIDAE

*Exaeretoptera fosteri
PIERCE, 1944c:15, pls. 5-6.
Holotype 2516; Upper Miocene; Fort MacArthur, San Pedro, Los Angeles
County, California.

Family GRYLLIDAE

Liogryllus rottenis
STATZ, 1939:8, pl. 2, figs. 8-9; pl. 3, figs. 12-13.
3 syntypes 3100 (pl. 2, figs. 8-9); 3102 (pl. 3, figs. 12-13); 3103 (unfigured);
Oligocene; Rott, Rheinland, Germany.
**Family PHASMIDAE**

*Calcibacunculus tenuis*

PIERCE, 1951c: 48, pl. 17, fig. 13; pl. 18, fig. 17.
Holotype 2526; Tertiary; Bonner Quarry, Kaibab National Forest, Yavapai County, Arizona.

**Family TETTIGONIIDAE**

*Protosegestes lloydii*

PIERCE, 1944c: 13, pl. 4.
Holotype 2517; Upper Miocene; Fort MacArthur, San Pedro, Los Angeles County, California.

*Tettigenitidarum* spec. indet. Nr. 1

STATZ, 1939, pl. 1, fig. 1.
Figured specimen 3103; Oligocene; Rott, Rheinland, Germany.

*Tettigenitidarum* spec. indet. Nr. 2

STATZ, 1939, pl. 1, fig. 2.
Figured specimen 3104; Oligocene; Rott, Rheinland, Germany.

**Order ISOPTERA**

**Family HODOTERMITIDAE**

*Calotermes rottensis*

STATZ, 1930: 12.

STATZ, 1939 as pl. 7, figs. 32-33.
STATZ, 1940a as figs. 3-4.

EMERSON, 1968 as figs. 2a-2c and 2f.

Lectotype 3105 (unfigured; Emerson, 1968: 16); 27 paralectotypes, 3106 (Statz, 1939, pl. 7, fig. 32-1); 3107 (Statz, 1939, pl. 7, fig. 32-2); 3108 (Statz, 1939, pl. 7, fig. 32-3); 3109 (Statz, 1939, pl. 8, fig. 33-1); 3110 (Statz, 1939, pl. 8, fig. 33-2); 3111 (Statz, 1939, pl. 8, fig. 33-3); 3112 (Statz, 1940a, fig. 4); 3113 (Emerson, 1968, fig. 2C); 3114 (Emerson, 1968, fig. 2F); 3115-3150 (unfigured); 4021-4022 (unfigured); Oligocene; Rott, Rheinland, Germany.

NOTE 1: In 1939 Statz changed the generic name from *Calotermes* to *Ulmeriella* and credited the species name to Meunier. Emerson (1968: 16) when selecting the lectotype could find no reason for attributing the species to Meunier.

NOTE 2: Statz stated that the original figured specimen for this species was in the Kastenholz collection. Emerson (1968) has selected the counterplate of this specimen as the lectotype.

*Ulmeriella bauckhoni* Meunier, 1920

STATZ, 1939, as pl. 6, figs. 28-30 and fig. 35.

STATZ, 1940a as fig. 1-2.

EMERSON, 1968 as figs. 2A-2B.

5 figured specimens 3131 (Statz, 1939, pl. 6, fig. 28); 3132 (Statz, 1939, pl. 6, fig. 29); 3133 (Statz, 1939, pl. 6, fig. 26; Statz, 1940a, fig. 1); 3134 (Statz, 1940a, fig. 2); 3135 (Emerson, 1968, figs. 2A-2B); Oligocene; Rott, Rheinland, Germany.

*Ulmeriella rottensis* (See *Calotermes rottensis*)
Family KALOTERMITIDAE

*Calotermes rhenanus* Hagen, 1863
STATZ, 1939 as pl. 8, figs. 34-35.
STATZ, 1940a as fig. 6.
STATZ, 1941c as fig. 5.
3 figured specimens 3136 (Statz, 1939, pl. 8, fig. 34); 3137 (Statz, 1939, pl. 8, fig. 35); 3138 (Statz, 1940a, fig. 6; 1941c, fig. 5); Oligocene; Rott, Rheinland, Germany.

*Cryptotermes ryskoffi*
PIERCE, 1958:19, pl. 5, fig. 1; pl. 6, fig. 1.
Holotype 2418; Miocene, Barstow Formation; southern Calico Mountains, San Bernardino County, California.

*Eotermes grandaeva*
STATZ, 1939:13, pl. 6, figs. 23-25.
EMERSON, 1969 as figs. 1-2.
Lectotype 3139 (Emerson, 1969, fig. 2); 4 paralectotypes 3140 (Statz, 1939, fig. 23); 3141 (Statz, 1939, fig. 24); 3142 (Emerson, 1969, fig. 1a); 3143 (Emerson, 1969, figs. 1b-1c); Oligocene; Rott, Rheinland, Germany.

Family RHINOTERMITIDAE

*Parastylotermes calico*
PIERCE, 1958:19, pl. 5, fig. 2; pl. 6, fig. 7.
EMERSON, 1971 as fig. 15.
Holotype 2520; Miocene, Barstow Formation; southern Calico Mountains, San Bernardino County, California.

*Recticulitermes laurae*
PIERCE, 1958:20, pl. 5, fig. 3; pl. 6, fig. 8; pl. 10, fig. 10.
EMERSON, 1971 as figs. 8-9.
Holotype 2521 (Pierce, 1958, pl. 5, fig. 3; pl. 7, fig. 10; Emerson, 1971, fig. 8); 4 paratypes 2522 (Pierce, 1958, pl. 6, fig. 8; Emerson, 1971, fig. 9); 2523-2525 (unfigured; 2524 MISSING); Miocene, Barstow Formation; southern Calico Mountains, San Bernardino County, California.

"Termes" adustus
STATZ, 1929:20, pl. 10, figs. 47-48.
Holotype 3144; Oligocene; Rott, Rheinland, Germany.

"Termes" aethiops
STATZ, 1939:19, pl. 9, fig. 39.
STATZ, 1940a as fig. 10.
Holotype 3145; Oligocene; Rott, Rheinland, Germany.

"Termes" atomus
STATZ, 1939:21, pl. 10, figs. 49-50.
Holotype 3146; Oligocene; Rott, Rheinland, Germany.

"Termes" blandus
STATZ, 1939:19, pl. 9, figs. 41-42.
Holotype 3147; paratype 3148 (unfigured); Oligocene; Rott, Rheinland, Germany.

"Termes" concinnus
STATZ, 1939:20, pl. 10, fig. 43.
STATZ, 1940a as fig. 11.
Holotype 3149; Oligocene; Rott, Rheinland, Germany.
"Termes" contractulus
STATZ, 1939:20, pl. 10, figs. 45-46.
Holotype 3150; Oligocene; Rott, Rheinland, Germany.

"Termes" holmgreni
STATZ, 1939:18, pl. 8, fig. 36.
STATZ, 1940a as fig. 9.
EMERSON, 1971 as fig. 7b.
Holotype 3151; Oligocene; Rott, Rheinland, Germany.

Family TERMITIDAE

Gnathamitermes magnoculus rousei
PIERCE, 1958:21, pl. 5, fig. 9; pl. 6, fig. 9.
Holotype 2519; Miocene, Barstow Formation; southern Calico Mountains, San Bernardino County, California.

Order HETEROPTERA
Family ANTHOCORIDAE

Temnostethus blandus
STATZ in STATZ and WAGNER, 1950:103, pl. 24, fig. 17.
Holotype 3152; Oligocene; Rott, Rheinland, Germany.

Family COREIDAE

Coreide sp. A. [sic] Coreidae
In STATZ and WAGNER, 1950 as pl. 27, fig. 47.
Figured specimen 3153; Oligocene; Rott, Rheinland, Germany.

Coreide sp. B. [sic] Coreidae
In STATZ and WAGNER, 1950 as pl. 27, fig. 48.
Figured specimen 3154; Oligocene; Rott, Rheinland, Germany.

Syromastes punctiventris
STATZ in STATZ and WAGNER, 1950:119, pl. 27, fig. 46.
Holotype 3155; Oligocene; Rott, Rheinland, Germany.

Family CORIXIDAE

Corixa ♂ Nr. 1
STATZ, 1950b as pl. 20, figs. 75-76.
2 figured specimens 3156 (pl. 20, fig. 75); 3157 (pl. 20, fig. 76) (MISSING);
Oligocene; Rott, Rheinland, Germany.

Corixa ♂ Nr. 2
STATZ, 1950b as pl. 20, fig. 78.
Figured specimen 3158; Oligocene; Rott, Rheinland, Germany.

Corixa ♂ Nr. 3
STATZ, 1950b as pl. 20, fig. 80.
Figured specimen 3159; Oligocene; Rott, Rheinland, Germany.

Corixa ♂ Nr. 4
STATZ, 1950b as pl. 20, fig. 81.
3 figured specimens 3160 (fig. 81; MISSING); 3161 (fig. 82); 3162 (fig. 83);
Oligocene; Rott, Rheinland, Germany.
Corixa rhenana
STATZ, 1950b:71, pl. 11, fig. 16; pl. 20, figs. 77 and 79.
2 syntypes 3163 (pl. 11, fig. 16; pl. 20, fig. 79); 3164 (pl. 30, fig. 77);
Oligocene; Rott, Rheinland, Germany.
NOTE: Syntype 3163 was figured by Statz (1938b, fig. 27) as Corixa
elegans von Schlechtendal, 1898.

Corixa vidua
STATZ, 1950b:72 (no figs.)
7 syntypes 3165-3171 (MISSING); Oligocene; Rott, Rheinland, Germany.

Family CYDNIDAE

Crocidesthus ? madens
STATZ in STATZ and WAGNER, 1950:126, pl. 22, fig. 9; pl. 28, fig. 56.
Holotype 3172; Oligocene; Rott, Rheinland, Germany.

Cydnus ? picatus
STATZ in STATZ and WAGNER, 1950:124, no figs.
Holotype 3173 (MISSING); Oligocene; Rott, Rheinland, Germany.

Sehirus lygaeus
STATZ in STATZ and WAGNER, 1950:125, pl. 28, figs. 58-59.
Holotype 3174; Oligocene; Rott, Rheinland, Germany.

Sehirus paludosus
STATZ in STATZ and WAGNER, 1950:125, pl. 28, fig. 57.
Holotype 3175; Oligocene; Rott, Rheinland, Germany.

Sehirus spinitibialis
STATZ in STATZ and WAGNER, 1950:126, pl. 22, fig. 11; pl. 28, fig. 55.
Holotype 3176; Oligocene; Rott, Rheinland, Germany.

Family VELIDAE

Velia bouatia
MEUNIER, 1914:191, fig. 3; pl. 4, fig. 6.
10 syntypes 4314 (fig. 3; pl. 4, fig. 6); 4315 (fig. 3); 4316 (fig. 3); 4317
(fig. 3); 4318 (fig. 3); 4319 (fig. 3); 4320-4323 (unfigured); Oligocene; Aix,
Provence, France.

Family GERRIDAE

Gerris sp. (Nymph)
STATZ, 1950b as pl. 20, fig. 84.
Figured specimen 3177 (MISSING); Oligocene; Rott, Rheinland, Germany.

Family LYGAEIDAE

Lygaeide sp. A
In STATZ and WAGNER, 1950 as pl. 26, fig. 36.
Figured specimen 3178; Oligocene; Rott, Rheinland, Germany.

Lygaeide sp. B
In STATZ and WAGNER, 1950 as pl. 36, fig. 37.
Figured specimen 3179; Oligocene; Rott, Rheinland, Germany.

Lygaeide sp. C
In STATZ and WAGNER, 1950 as pl. 26, fig. 38.
Figured specimen 3180; Oligocene; Rott, Rheinland, Germany.

Lygaeide sp. D
In STATZ and WAGNER, 1950 as pl. 26, fig. 39.
Figured specimen 3181; Oligocene; Rott, Rheinland, Germany.
Lygaeide sp. E
In STATZ and WAGNER, 1950 as pl. 26, fig. 40.
Figured specimen 3182; Oligocene; Rott, Rheinland, Germany.

Lygaeide sp. I

Lygaeide sp. H
In STATZ and WAGNER, 1950 as pl. 26, fig. 42.
Figured specimen 3183; Oligocene; Rott, Rheinland, Germany.
In STATZ and WAGNER, 1950 as pl. 26, fig. 43.
Figured specimen 3184 (MISSING); Oligocene; Rott, Rheinland, Germany.

Heterogasterine sp.
In STATZ and WAGNER, 1950 as pl. 25, figs. 27-28.
Figured specimen 3185; Oligocene; Rott, Rheinland, Germany.

Chilacis ? univestris
STATZ in STATZ and WAGNER, 1950:108, pl. 24, fig. 22.
Holotype 3186; Oligocene; Rott, Rheinland, Germany.

Drymus punctatus
STATZ in STATZ and WAGNER, 1950:113, pl. 26, fig. 35.
Holotype 3187; Oligocene; Rott, Rheinland, Germany.

Ischnodemus rottensis
4 syntypes; 3188 (fig. 24); 3189-3191 (unfigured); Oligocene; Rott, Rheinland, Germany.
NOTE: Statz refers to an unspecified number of specimens (syntypes), four in his collection and the remainder in the Kastenholz collection. Only one of those figured is in the LACM collection. The other two figured specimens are presumed to be in the Kastenholz collection.

Lygaeosoma wagneri
STATZ in STATZ and WAGNER, 1950:107, pl. 21, fig. 2; pl. 24, fig. 23.
Holotype 3192; Oligocene; Rott, Rheinland, Germany.

Pionosomus ? pusillus
STATZ in STATZ and WAGNER, 1950:110, pl. 25, fig. 31.
Holotype 3193; Oligocene; Rott, Rheinland, Germany.

Raglius austerus
STATZ in STATZ and WAGNER, 1950:111, pl. 25, fig. 32.
Holotype 3194; Oligocene; Rott, Rheinland, Germany.

Raglius ? decoratus
STATZ in STATZ and WAGNER, 1950:112, pl. 25, figs. 33-34.
Holotype 3195; Oligocene; Rott, Rheinland, Germany.

Raglius pulchellus
STATZ in STATZ and WAGNER, 1950:110, pl. 25, fig. 30.
Holotype 3196; Oligocene; Rott, Rheinland, Germany.

Scolopostethus statzi
WAGNER in STATZ and WAGNER, 1950:116, pl. 26, fig. 41.
Holotype 3197; Oligocene; Rott, Rheinland, Germany.


Family MIRIDAE

Calocoris antennatus
STATZ and WAGNER, 1950 as pl. 24, fig. 21.
24, fig. 18.
Holotype 3198; Oligocene; Rott, Rheinland, Germany.
**Heterocordylus** sp.
  STATZ and WAGNER, 1950 as pl. 24, fig. 21.
  Figured specimen 3199; Oligocene; Rott, Rheinland, Germany.

**Lygus** ? oligocaenica
  STATZ in STATZ and WAGNER, 1950:105, pl. 24, fig. 19.
  Holotype 3200 (MISSING); Oligocene; Rott, Rheinland, Germany.

**Trapezonotus** ? rigus
  STATZ in STATZ and WAGNER, 1950:112, pl. 25, fig. 29.
  Holotype 3201; Oligocene; Rott, Rheinland, Germany.

**Trapezonotus** ? striatus
  WAGNER in STATZ and WAGNER, 1950:105, pl. 24, fig. 20.
  Holotype 3202; Oligocene; Rott, Rheinland, Germany.

**Family** NAUCORIDAE

**Naucoris rottenis** Schlechtendal, 1899
  STATZ, 1938b, fig. 28.
  STATZ, 1950b, pl. 12, figs. 24-31; pl. 13, figs. 32-34; pl. 14, figs. 37-40;
  pl. 15, figs. 41-42, 44-47.
  FURST, 1959:17, p. 17, pl. and fig. unnumbered.
  19 figured specimens 3203 (Statz, 1938b, fig. 28; Statz, 1950b, pl. 13, fig. 34;
  Furst, 1959:17); 3204 (Statz, 1950b, pl. 12, fig. 24); 3205 (Statz, 1950b,
  pl. 12, fig. 25); 3206 (Statz, 1950b, pl. 12, fig. 26); 3207 (Statz, 1950b, pl. 12,
  fig. 27); 3208 (Statz, 1950b; pl. 12, fig. 28); 3209 (Statz, 1950b, pl. 12,
  fig. 29); 3210 (Statz, 1950b, pl. 12, fig. 30); 3211 (Statz, 1950b, pl. 12,
  fig. 31); 3212 (Statz, 1950b, pl. 13, figs. 32 and 33); 3213 (Statz, 1950b,
  pl. 14, fig. 37); 3214 (Statz, 1950b, pl. 14, fig. 38); 3215 (Statz, 1950b,
  pl. 14, fig. 39); 3216 (Statz, 1950b, pl. 14, fig. 40); 3217 (Statz, 1950b,
  pl. 15, fig. 41); 3218 (Statz, 1950b, pl. 15, fig. 42); 3219 (Statz, 1950b,
  pl. 15, fig. 44); 3220 (Statz, 1950b, pl. 15, figs. 45 and 46); 3221 (Statz, 1950b,
  pl. 15, fig. 47); Oligocene; Rott, Rheinland, Germany.

**Family** NEPIDAE

**Ranatra asphalti**
  PIERCE, 1948b:29, pl. 6, figs. 13-15.
  Holotype 2564; Pleistocene; asphalt deposit at McKittrick, Kern County,
  California.

**Renatra bessomi**
  PIERCE, 1948b:27, pl. 6, figs. 11-12; pl. 7, figs. 16-18.
  Holotype 2565, 6 paratypes 2566-2571; Pleistocene; asphalt deposit at
  McKittrick, Kern County, California.
  NOTE: I am unable to match the specimens with the drawings which appear
  to be composite.

**Family** NOTONECTIDAE

**Notonecta (Paranecta) badia**
  PIERCE, 1948b:24, pl. 5, figs. 4-9.
  Holotype 2527; allotype 2528; 36 paratypes 2529-2562; Pleistocene; asphalt
  deposit at McKittrick, Kern County, California.
  NOTE: I am unable to match the specimens with the drawings.

**Notonecta jubata** Schlechtendal, 1894
  STATZ, 1938b as fig. 29.
  Figured specimen 3222; Oligocene; Rott, Rheinland, Germany.
**Notonecata primaeva** Heyden, 1859

STATZ, 1950b as pl. 16, figs. 49-53; pl. 17, figs. 58-59.
6 figured specimens 3223 (pl. 16, fig. 49); 3224 (pl. 16, fig. 50); 3225 (pl. 16, fig. 51); 3226 (pl. 16, fig. 52, MISSING); 3227 (pl. 16, fig. 53); 3228 (pl. 17, figs. 58 and 59); Oligocene; Rott, Rheinland, Germany.

**Sooevenia heydeni** (Deichmüller, 1881)

STATZ, 1950b as pl. 13, figs. 35-36; pl. 17, figs. 54-57; pl. 18, figs. 60-67; pl. 19, figs. 68-74.
21 figured specimens 3229 (pl. 13, fig. 35); 3230 (pl. 13, fig. 36); 3231 (pl. 17, fig. 54); 3232 (pl. 17, fig. 55); 3233 (pl. 17, fig. 56); 3234 (pl. 17, fig. 57); 3235 (pl. 18, fig. 60); 3236 (pl. 18, fig. 61); 3237 (pl. 18, fig. 62); 3238 (pl. 18, fig. 63); 3239 (pl. 18, fig. 64); 3240 (pl. 18, fig. 65); 3241 (pl. 18, fig. 66); 3242 (pl. 18, fig. 67); 3243 (pl. 19, fig. 68); 3244 (pl. 19, fig. 69); 3245 (pl. 19, fig. 70, MISSING); 3246 (pl. 19, fig. 71); 3247 (pl. 19, fig. 72); 3248 (pl. 19, fig. 73); 3249 (pl. 19, fig. 74); Oligocene; Rott, Rheinland, Germany.

**Family PENTATOMIDAE**

**Dinidorine sp. A**

STATZ and WAGNER, 1950 as pl. 28, fig. 51.
Figured specimen 3250 (MISSING); Oligocene; Rott, Rheinland, Germany.

**Pentatomine sp. A**

STATZ and WAGNER, 1950 as pl. 28, fig. 52.
Figured specimen 3251 (MISSING); Oligocene, Rott, Rheinland, Germany.

**Pentatomine sp. B**

STATZ and WAGNER, 1950 as pl. 28, fig. 53.
Figured specimen 3252; Oligocene; Rott, Rheinland, Germany.

**Pentatomine sp. C**

STATZ and WAGNER, 1950 as pl. 28, fig. 54.
Figured specimen 3253; Oligocene; Rott, Rheinland, Germany.

**Family PYRRHOCORIDAE**

**Pyrrhocoris ? tibialis**

STATZ in STATZ and WAGNER, 1950:118, pl. 27, fig. 44.
Holotype 3257; Oligocene; Rott, Rheinland, Germany.

**Family REDUVIIDAE**

**Rhinocoris michalki**

STATZ in STATZ and WAGNER, 1950:102, pl. 23, fig. 16.
Syntype 3258 (MISSING); Oligocene; Rott, Rheinland, Germany.
NOTE: There is another figured syntype (pl. 21, fig. 3; pl. 23, fig. 15) in the Kastenholz collection.

**Family SALDIDAE**

*Oligosaltdina aquatilis*

Holotype 3259 (MISSING); Oligocene; Rott, Rheinland, Germany.

*Oligosaltdina rhenana*

STATZ in STATZ and WAGNER, 1950:100, pl. 23, fig. 13.
Holotype 3260 (MISSING); Oligocene; Rott, Rheinland, Germany.

*Oligosaltdina rottensis*

STATZ in STATZ and WAGNER, 1950:99, pl. 23, fig. 12.
Holotype 3261 (MISSING); Oligocene; Rott, Rheinland, Germany.
Family SCUTELLERIDAE
Scutellerine sp. A
STATZ and WAGNER, 1950 as pl. 27, fig. 45.
Figured specimen 3254 (MISSING); Oligocene; Rott, Rheinland, Germany.
Scutellerine sp. B
STATZ and WAGNER, 1950 as pl. 27, fig. 49.
Figured specimen 3255; Oligocene; Rott, Rheinland, Germany.
Poecilocoris ? rottensis
STATZ in STATZ and WAGNER, 1950:121, pl. 27, fig. 50.
Holotype 3256; Oligocene; Rott, Rheinland, Germany.

Order HOMOPTERA
Family AETHIALIONIDAE
Aethalion ? oligocaenica
STATZ, 1950a:6, pl. 3, figs. 32-33.
Holotype 3262; Oligocene; Rott, Rheinland, Germany.

Family CERCOPIDAE
Cercopsis ? sp.
STATZ, 1950a as pl. 1, fig. 3; pl. 3, fig. 34.
Figured specimen 3263; Oligocene; Rott, Rheinland, Germany.

Family CHERMIDAE
*Draycotia cordovae
PIERCE, 1948a:43, pl. 9.
Holotype 2572; Pleistocene; Cordova Bay, Vancouver Island, British Columbia, Canada.

Family CICADELLIDAE
*Miochlorotettix gibroni
PIERCE, 1963:73, figs. 1-2, 15-17.
Holotype 2573 (figs. 1 and 15); allotype 2574 (figs. 16-17); figured paratype 2576 (fig. 2, MISSING); 9 unfigured paratypes 2575 and 2577-2584 (2577-2584 MISSING); Miocene, Barstow Formation; southern Calico Mountains, San Bernardino County, California.

*Miochlorotettix kirkbyi
PIERCE, 1963:77, figs. 5 and 10-12.
Holotype 2585 (MISSING); Miocene, Barstow Formation; southern Calico Mountains, San Bernardino County, California.

*Mionesamia juliae
PIERCE, 1963:81, figs. 8-9.
Holotype 2586; Miocene, Barstow Formation; southern Calico Mountains, San Bernardino County, California.

Phlepsius weissmanna
PIERCE, 1963:80, figs. 13-14.
Holotype 2563; Miocene, Barstow Formation; southern Calico Mountains, San Bernardino County, California.

*Protochlorotettix calico
PIERCE, 1963:78, figs. 3-4 and 18.
Holotype 2587; Miocene, Barstow Formation; southern Calico Mountains, San Bernardino County, California.
Family CIXIIDAE

*Cixius* ? sp.
STATZ, 1950a as pl. 1, fig. 1; pl. 3, fig. 28.
Figured specimen 3264; Oligocene; Rott, Rheinland, Germany.

"Cixius" sp.
STATZ, 1950a as pl. 1, fig. 2; pl. 3, fig. 29.
Figured specimen 3265; Oligocene; Rott, Rheinland, Germany.

*Hyalesthes* ? *rottensis*
STATZ, 1950a:4, pl. 3, fig. 30.
Holotype 3266 (MISSING); Oligocene; Rott, Rheinland, Germany.

Family DELPHACIDAE

"Delphax" *rhenana*
STATZ, 1950a:5, pl. 3, fig. 31.
Holotype 3267; Oligocene; Rott, Rheinland, Germany.

Family JASSIDAE

*Batracromorphus* ? *femoralis*
STATZ, 1950a:9, pl. 4, fig. 44.
Holotype 3268; Oligocene; Rott, Rheinland, Germany.

*Bythoscopus lunatus*
STATZ, 1950a:13, pl. 5, fig. 54.
Holotype 3269; Oligocene; Rott, Rheinland, Germany.

*Bythoscopus robustus*
STATZ, 1950a:14, pl. 5, fig. 55; pl. 6, fig. 56.
2 syntypes 3270 (pl. 5, fig. 55 MISSING); 3271 (pl. 6, fig. 56); Oligocene; Rott, Rheinland, Germany.

*Bythoscopus sepultus* (Meunier, 1917)
STATZ, 1950a as pl. 4, fig. 45; pl. 5, fig. 46-51.
7 figured specimens 3272 (pl. 4, fig. 45, MISSING); 3273 (pl. 5, fig. 46, MISSING); 3274 (pl. 5, fig. 47); 3275 (pl. 5, fig. 48); 3276 (pl. 5, fig. 49); 3277 (pl. 5, fig. 50, MISSING); 3278 (pl. 5, fig. 51); Oligocene; Rott, Rheinland, Germany.

*Bythoscopus sepultus australis*
STATZ, 1950a:13, pl. 5, figs. 52-53.
11 syntypes 3279 (pl. 5, fig. 52); 3280 (pl. 5, fig. 53); 3281-3289 (unfigured); Oligocene; Rott, Rheinland, Germany.

*Deltocephalus aberrans*
STATZ, 1950a:18, pl. 2, fig. 19; pl. 6, figs. 63 and 65.
Holotype 3290 (MISSING); Oligocene; Rott, Rheinland, Germany.

*Deltocephalus* ? *maculipennis*
STATZ, 1950a:20, pl. 7, figs. 68-69.
2 syntypes 3291 (fig. 68); 3292 (fig. 69); Oligocene; Rott, Rheinland, Germany.

*Deltocephalus* ? *maculosus*
STATZ, 1950a:22, pl. 8, fig. 72.
Holotype 3293; Oligocene; Rott, Rheinland, Germany.
STATZ, 1950a:20, pl. 7, fig. 67.

*Deltocephalus nervosus*
Holotype 3294; Oligocene; Rott, Rheinland, Germany.
Deltoccephalus ? pennatus
STATZ, 1950a:22, pl. 7, fig. 71.
Holotype 3295; Oligocene; Rott, Rheinland, Germany.

Deltoccephalus robustus
STATZ, 1950a:19, pl. 2, fig. 22; pl. 7, fig. 66.
Holotype 3296; Oligocene; Rott, Rheinland, Germany.

Deltoccephalus rottensis
STATZ, 1950a:18, pl. 2, figs. 20-21; pl. 6, fig. 64.
Holotype 3297; Oligocene; Rott, Rheinland, Germany.

Deltoccephalus ? spinitibialis
STATZ, 1950a:21, pl. 7, fig. 70.
Holotype 3298; Oligocene; Rott, Rheinland, Germany.

Euscelis platoeus
STATZ, 1950a:23, pl. 8, fig. 73.
4 syntypes 3299 (pl. 8, fig. 73); 3300-3302 (unfigured); 3302 (MISSING);
Oligocene; Rott, Rheinland, Germany.

*Gyponites abdominalis
STATZ, 1950a:11, pl. 4, fig. 43.
Holotype 3303; Oligocene; Rott, Rheinland, Germany.

*Gyponites pronota
STATZ, 1950a:10, pl. 4, fig. 42.
Holotype 3304; Oligocene; Rott, Rheinland, Germany.

Idiocerus ? sp.
STATZ, 1950a, as pl. 6, fig. 59.
Figured specimen 3305; Oligocene; Rott, Rheinland, Germany.

Idiocerus goeckei
STATZ, 1950a:17, pl. 6, figs. 60-62.
2 syntypes 3306 (figs. 60-61); 3307 (fig. 62); Oligocene; Rott, Rheinland, Germany.

Macropsis pectoralis
STATZ, 1950a:15, pl. 6, fig. 57.
Holotype 3308; Oligocene; Rott, Rheinland, Germany.

*Oligogypona haupti
STATZ, 1950a:8, pl. 1, figs. 8-9; pl. 4, fig. 39.
Holotype 3309; Oligocene; Rott, Rheinland, Germany.

*Oligoidiocerus pronotumalis
STATZ, 1950a:16, pl. 2, fig. 17; pl. 6, fig. 58.
Holotype 3310; Oligocene; Rott, Rheinland, Germany.

*Oligophenthimia ovalis
STATZ, 1950a:9, pl. 1, fig. 6; pl. 4, figs. 40-41.
Holotype 3311; Oligocene; Rott, Rheinland, Germany.

Paroptia ? forivenosa
STATZ, 1950a:6, pl. 1, fig. 4; pl. 3, figs. 35-36.
Holotype 3312; Oligocene; Rott, Rheinland, Germany.

Tettonotetitia ? capitata
STATZ, 1950a:7, pl. 1, fig. 5; pl. 4, figs. 37-38.
Holotype 3313; Oligocene; Rott, Rheinland, Germany.

Tettonotetitia sp.
STATZ, 1950a as pl. 8, fig. 79.
Figured specimen 3314; Oligocene; Rott, Rheinland, Germany.
Thamnotettix ampliventris
STATZ, 1950a:24, pl. 8, fig. 76.
3 syntypes 3315 (pl. 8, fig. 76); 3316-3318 (unfigured; 3318 MISSING); Oligocene; Rott, Rheinland, Germany.

Thamnotettix angustipennis
STATZ, 1950a:24, pl. 2, fig. 25; pl. 8, fig. 75.
Holotype 3319; Oligocene; Rott, Rheinland, Germany.

Thamnotettix ? anthracinus
STATZ, 1950a:26, pl. 8, fig. 78.
Holotype 3320; Oligocene; Rott, Rheinland, Germany.

Thamnotettix clypealis
STATZ, 1950a:26, pl. 8, fig. 80.
2 syntypes 3321 (pl. 8, fig. 80); 3322 (unfigured); Oligocene; Rott, Rheinland, Germany.

Thamnotettix gracilentus
STATZ, 1950a:25, pl 8, fig. 77.
12 syntypes 3323 (pl. 8, fig. 77); 3324-3334 (unfigured; 3334 MISSING); Oligocene; Rott, Rheinland, Germany.

Thamnotettix ustus
STATZ, 1950a:23, pl. 2, fig. 24; pl. 8, fig. 74.
Holotype 3335; Oligocene; Rott, Rheinland, Germany.

Order THYSANOPTERA
Family THRIPIDAE

Thrips sp.
STATZ, 1941b as figs. 1-5.
5 figured specimens 3336 (fig. 1); 3337 (fig. 2); 3338 (fig. 3); 3339 (fig. 4); 3340 (fig. 5); Oligocene; Rott, Rheinland, Germany.

Order NEUROPTERA
Family CHRYSOPIDAE

Notochrysa [sic Nothochrysa] praeclara
STATZ, 1936a:215, figs. 3-4.
Holotype 3341; Oligocene; Rott, Rheinland, Germany.

Family MYRMELEONTIDAE

Dendroleon septemmontanus
STATZ, 1936a:212, figs. 1-2.
Holotype 3342; Oligocene; Rott, Rheinland, Germany.

Order MECOPTERA
Family PANORPIDAE

Panorpa gracilis
STATZ, 1936a:216, figs. 5-7.
Holotype 3343; Oligocene; Rott, Rheinland, Germany.

Panorpa maculatuosa
STATZ, 1936a:220, figs. 10-11.
Holotype 3344; Oligocene; Rott, Rheinland, Germany.
**Panorpa rottensis**

Statz, 1936a:218.
Holotype 3345; Oligocene; Rott, Rheinland, Germany.
NOTE: The figured half of the holotype (figs. 8-9) is in the Kastenholz collection.

**Neuronia excellenta**

Statz, 1936a:221.
Holotype 3346; Oligocene; Rott, Rheinland, Germany.
NOTE: The figured half of the holotype (figs. 12-13) is in the Kastenholz collection.

**Phryganea pupa Nr. 1**

Statz, 1936a as fig. 14.
Figured specimen 3347 (MISSING); Oligocene; Rott, Rheinland, Germany.

**Phryganea** pupa Nr. 2

Statz, 1936a as fig. 16.
Figured specimen 3348; Oligocene; Rott, Rheinland, Germany.

**Phryganea** pupa Nr. 3

Statz, 1936a as fig. 19.
Figured specimen 3349; Oligocene; Rott, Rheinland, Germany.

**Phryganea elegansula** Meunier, 1920

Statz, 1936a as figs. 21-22.
Figured specimen 3350; Oligocene; Rott, Rheinland, Germany.

**Phryganea lithophila**

2 syntypes 3351 (unfigured); 3352 (unfigured); Oligocene; Rott, Rheinland, Germany.
NOTE: According to the label with the specimen (LACM 3351) it is the counterplate to the figured specimen. The figured portion is missing. Statz made no mention of more than one specimen in the type lot, but I consider a second specimen labeled as this species in the collection (LACM 3352) to be an additional syntype.

**Phryganea meuniere**

Statz, 1936a:236.
Holotype 3353; Oligocene; Rott, Rheinland, Germany.
NOTE: The figured plate (figs. 27-28) is in the Kastenholz collection. Our specimen is the counterplate.

**Phryganea submersa**

Holotype 3354; Oligocene; Rott, Rheinland, Germany.

**Order TRICHOPTERA**

**Family PHRYGANEIDAE**

*Protohepialus comstocki*

Pierce, 1945b:5, pl. 3-4.
Holotype 3072; Upper Miocene; Puente Hills, SE of Puente, Los Angeles County, California.
Order DIPTERA
Family ANTHOMYZIDAE

_Anthomyza_ ? rhenana
STATZ, 1940b:150, pl. 26, fig. 85.
2 syntypes 3355 (pl. 22, fig. 85); 3356 (unfigured); Oligocene; Rott, Rheinland, Germany.

Family BIBIONIDAE

_Bibio_ \( \delta \) Nr. 2
STATZ, 1943 as pl. 4, fig. 36 and pl. 12, fig. 95.
Figured specimen 3357; Oligocene; Rott, Rheinland, Germany.

_Bibio_ \( \delta \) Nr. 3
STATZ, 1943 as pl. 4, fig. 37, and pl. 12, fig. 94.
Figured specimen 3358; Oligocene; Rott, Rheinland, Germany.

_Bibio_ \( \delta \) Nr. 4
STATZ, 1943 as pl. 4, fig. 38 and pl. 12, fig. 96.
Figured specimen 3359; Oligocene; Rott, Rheinland, Germany.

_Bibio_ \( \delta \) Nr. 5
STATZ, 1943 as pl. 4, fig. 39 and pl. 12, fig. 97.
Figured specimen 3360; Oligocene; Rott, Rheinland, Germany.

_Bibio_ \( \delta \) Nr. 6
STATZ, 1943 as pl. 4, fig. 40 and pl. 12, fig. 98.
Figured specimen 3361 (MISSING); Oligocene; Rott, Rheinland, Germany.

_Bibio aerosa_
STATZ, 1943:50, pl. 4, fig. 32; pl. 11, fig. 91.
Holotype 3362; Oligocene; Rott, Rheinland, Germany.

_Bibio auripes_
STATZ, 1943:51, pl. 4, fig. 34; pl. 11, fig. 92.
Holotype 3363; Oligocene; Rott, Rheinland, Germany.

_Bibio comosella_
STATZ, 1943:47, pl. 11, fig. 87.
2 syntypes 3364 (pl. 11, fig. 87); 3365 (unfigured); Oligocene; Rott, Rheinland, Germany.

_Bibio compta_
STATZ, 1943:52, pl. 4, fig. 35; pl. 12, fig. 93.
Holotype 3366; Oligocene; Rott, Rheinland, Germany.

_Bibio rohli_
STATZ, 1943:46, pl. 11, fig. 86.
Holotype 3367; Oligocene; Rott, Rheinland, Germany.
NOTE: The figured plate is in the Kastenholz collection. Our specimen is the counterplate.

_Bibio rottensis_
STATZ, 1943:48, pl. 11, fig. 88.
6 syntypes 3368 (pl. 11, fig. 88); 3369-3373 (unfigured); Oligocene; Rott, Rheinland, Germany.
NOTE: There are 4 additional syntypes in the Kastenholz collection and 1 in the Siegburger collection.

_Bibio spadicea_
STATZ, 1943:51, pl. 4, fig. 33; pl. 11, fig. 90.
Holotype 3374; Oligocene; Rott, Rheinland, Germany.

_Bibio vulpina_
STATZ, 1943:49, pl. 4, fig. 31; pl. 11, fig. 89.
Holotype 3375; Oligocene; Rott, Rheinland, Germany.
Penthetria ♂ Nr. 1
STATZ, 1943 as pl. 10, fig. 81.
Figured specimen 3376; Oligocene; Rott, Rheinland, Germany.

Penthetria ♂ Nr. 2
STATZ, 1943 as pl. 10, fig. 85.
Figured specimen 3377; Oligocene; Rott, Rheinland, Germany.

Penthetria sp.
STATZ, 1943 as pl. 3, fig. 25.
Figured specimen 3378; Oligocene; Rott, Rheinland, Germany.

Penthetria aestivala
STATZ, 1943:39, pl. 10, figs. 79-80.
3 syntypes 3379 (pl. 10, fig. 79); 3380 (pl. 10, fig. 80); 3381 (unfigured);
Oligocene; Rott, Rheinland, Germany.

NOTE: The counterplate to LACM 3379 is in the Kastenholz collection.

Penthetria nigra
STATZ, 1943:38, pl. 3, fig. 20.
Holotype 3382; Oligocene; Rott, Rheinland, Germany.

Penthetria rotensis
STATZ, 1943:40, pl. 3, fig. 27; pl. 10, fig. 83.
Holotype 3383; Oligocene; Rott, Rheinland, Germany.

Penthetria scita
STATZ, 1943:40, pl. 3, fig. 23; pl. 10, fig. 84.
Holotype 3384; Oligocene; Rott, Rheinland, Germany.

Penthetria tropica
STATZ, 1943:39, pl. 3, fig. 22; pl. 10, fig. 82.
Holotype 3385; Oligocene; Rott, Rheinland, Germany.

Plecia
STATZ, 1942a as fig. 5.
Figured specimen 3386 (MISSING); Oligocene; Rott, Rheinland, Germany.

Plecia ♂ Nr. 1
STATZ, 1943 as pl. 8, fig. 67.
Figured specimen 3387; Oligocene; Rott, Rheinland, Germany.

Plecia ♂ Nr. 2
STATZ, 1943 as pl. 1, fig. 10; pl. 8, fig. 70.
Figured specimen 3388; Oligocene; Rott, Rheinland, Germany.

Plecia ♂ Nr. 3
STATZ, 1943 as pl. 8, fig. 68.
Figured specimen 3389; Oligocene; Rott, Rheinland, Germany.

Plecia ♂ Nr. 4
STATZ, 1943 as pl. 1, fig. 11; pl. 8, fig. 69.
Figured specimen 3390; Oligocene; Rott, Rheinland, Germany.

Plecia ♂ Nr. 5
STATZ, 1943 as pl. 1, fig. 12; pl. 8, fig. 72.
Figured specimen 3391; Oligocene; Rott, Rheinland, Germany.

Plecia ♂ Nr. 6
STATZ, 1943 as pl. 1, fig. 13; pl. 8, fig. 71.
Figured specimen 3392; Oligocene; Rott, Rheinland, Germany.

Plecia ♂ Nr. 7
STATZ, 1943 as pl. 2, fig. 14; pl. 9, fig. 73.
Figured specimen 3393; Oligocene; Rott, Rheinland, Germany.

Plecia ♂ Nr. 10
STATZ, 1943 as pl. 2, fig. 15; pl. 9, fig. 74.
Figured specimen 3394; Oligocene; Rott, Rheinland, Germany.
Plecia ♀ Nr. 12
STATZ, 1943 as pl. 2, fig. 18; pl. 9, fig. 75.
Figured specimen 3395; Oligocene; Rott, Rheinland, Germany.

Plecia ♂ Nr. 13
STATZ, 1943 as pl. 2, fig. 19; pl. 9, fig. 78.
Figured specimen 3396; Oligocene; Rott, Rheinland, Germany.

Plecia ♀ Nr. 14
STATZ, 1943 as pl. 2, fig. 17; pl. 9, fig. 77.
Figured specimen 3397; Oligocene; Rott, Rheinland, Germany.

Plecia ♀ Nr. 15
STATZ, 1943 as pl. 2, fig. 16; pl. 9, fig. 76.
Figured specimen 3398; Oligocene; Rott, Rheinland, Germany.

Plecia sp.
STATZ, 1942a as fig. 4.
STATZ, 1943 as pl. 7, fig 61.
2 figured specimens 3399 (Statz, 1942a, fig. 4; MISSING); 3400 (Statz, 1943, pl. 7, fig 61); Oligocene; Rott, Rheinland, Germany.

Plecia exigua
STATZ, 1943:26, pl. 7, fig. 63.
2 syntypes 3401 (pl. 7, fig. 63); 3402 (unfigured); Oligocene; Rott, Rheinland, Germany.

Plecia exposita (Heyden, 1865)
STATZ, 1943 as pl. 7, fig. 59.
Figured specimen 3404; Oligocene; Rott, Rheinland, Germany.

Plecia grossa (Heyden, 1865)
STATZ, 1943 as pl. 7, fig. 58.
Figured specimen 3404; Oligocene; Rott, Rheinland, Germany.

Plecia grandaeve (Heyden, 1865)
STATZ, 1943 as pl. 7, fig. 65.
Figured specimen 3405; Oligocene; Rott, Rheinland, Germany.

Plecia hypogaeae (Heyden, 1865)
STATZ, 1943 as pl. 6, fig. 51.
Figured specimen 3406; Oligocene; Rott, Rheinland, Germany.

Plecia imperialis
STATZ, 1943:13, pl. 1, fig. 3; pl. 5, fig. 48.
Holotype 3407; Oligocene; Rott, Rheinland, Germany.

Plecia lapidaria (Heyden, 1865)
STATZ, 1943 as pl. 7, fig. 60.
Figured specimen 3408; Oligocene; Rott, Rheinland, Germany.

Plecia lapidaria nigra
STATZ, 1943:25, pl. 7, fig. 64.
4 syntypes 3409 (pl. 7, fig. 64); 3410-3412 (unfigured); Oligocene; Rott, Rheinland, Germany.

Plecia luctuosa (Heyden, 1865)
STATZ, 1943 as pl. 6, fig. 53.
Figured specimen 3413; Oligocene; Rott, Rheinland, Germany.

Plecia pennata
STATZ, 1943:19, pl. 1, fig. 4; pl. 6, fig. 57.
Holotype 3414; Oligocene; Rott, Rheinland, Germany.

Plecia philippi
STATZ, 1943:10, pl. 1, fig. 1; pl. 5, fig. 50.
Holotype 3415; Oligocene; Rott, Rheinland, Germany.
Plecia pinguis (Heyden, 1865)
STATZ, 1943 as pl. 6, fig. 56.
Figured specimen 3416; Oligocene; Rott, Rheinland, Germany.

Plecia proserpina (Heyden, 1865)
STATZ, 1943 as pl. 6, fig. 55.
Figured specimen 3417; Oligocene; Rott, Rheinland, Germany.

Plecia rhena Heyden, 1865
STATZ, 1943 as pl. 5, figs. 45-46.
FURST, 1959, p. 16, top two figures, unnumbered.
Figured specimen 3418; Oligocene; Rott, Rheinland, Germany.

Plecia satyrus
STATZ, 1943:12, pl. 5, fig. 47.
6 syntypes 3419 (pl. 5, fig. 47); 3420-3424 (unfigured, 3423 and 3424 MISSING); Oligocene; Rott, Rheinland, Germany.

Plecia sturmi
STATZ, 1943:20, pl. 1, fig. 5; pl. 6, fig. 54.
Holotype 3425; Oligocene; Rott, Rheinland, Germany.

Plecia stygia (Heyden, 1865)
STATZ, 1942a as fig. 6.
STATZ, 1943 as pl. 7, fig. 62.
Figured specimen 3426; Oligocene; Rott, Rheinland, Germany.

Plecia veterana (Heyden, 1865)
STATZ, 1943 as pl. 5, fig. 49.
Figured specimen 3427; Oligocene; Rott, Rheinland, Germany.

Plecia vulpinia
STATZ, 1943:27, pl. 7, fig. 66.
2 syntypes 3428 (pl. 7, fig. 66); 3429 (unfigured); Oligocene; Rott, Rheinland, Germany.

Plecia winnertzi (Heyden, 1865)
STATZ, 1943 as pl. 6, fig. 52.
Figured specimen 3430; Oligocene; Rott, Rheinland, Germany.

Family BOMBYIIDAE

Spongostylum sp.
STATZ, 1940b as pl. 19, fig. 11; pl. 23, fig. 62.
Figured specimen 3431; Oligocene; Rott, Rheinland, Germany.

Usia atra
STATZ, 1940b:131, pl. 19, fig. 10; pl. 23, fig. 61.
Holotype 3432; Oligocene; Rott, Rheinland, Germany.

Family CALLIPHORIDAE

*Protochrysomyia howardae*
PIERCE, 1945d:8, pl. 6.
? 11 syntypes 3073-3083; Pleistocene; Pit 3, Rancho La Brea, Los Angeles, Los Angeles County, California.
NOTE: There may be more fragments or whole specimens imbedded in the bone matrix.

Family CERATOPOGONIDAE

Atrichopogon brunnescens
STATZ, 1944c:141, pl. 8, fig. 57.
9 syntypes 3433 (pl. 8, fig. 57); 3434-3441 (unfigured; 3441 MISSING); Oligocene; Rott, Rheinland, Germany.
Bezzia ? longipennis
STATZ, 1944c: 151, pl. 7, fig. 55; pl. 10, fig. 80.
Holotype 3442; Oligocene; Rott, Rheinland, Germany.

"Ceratopogon" sp.
STATZ, 1941b as fig. 11.
STATZ, 1944c as pl. 10, figs. 82-83.
3 figured specimens 3443 (Statz 1941b, fig. 11, MISSING); 3444 (Statz, 1944c, pl. 10, fig. 82); 3445 (Statz 1944c, pl. 10, fig. 83); Oligocene; Rott, Rheinland, Germany.

"Ceratopogon" pupa Nr. 1
STATZ, 1944c as pl. 7, fig. 54; pl. 10, fig. 84, figs. 86-87.
4 figured specimens 3446 (pl. 7, fig. 54); 3447 (pl. 10, fig. 85); 3448 (pl. 10, fig. 86); 3449 (pl. 10, fig. 87); Oligocene; Rott, Rheinland, Germany.

"Ceratopogon" pupa Nr. 2
STATZ, 1944c as pl. 10, fig. 88.
Figured specimen 3450; Oligocene; Rott, Rheinland, Germany.

"Ceratopogon" pupa Nr. 3
STATZ, 1944c as pl. 10, fig. 89.
Figured specimen 3451; Oligocene; Rott, Rheinland, Germany.

"Ceratopogon" pupa Nr. 4
STATZ, 1944c as pl. 11, fig. 90.
Figured specimen 3452; Oligocene; Rott, Rheinland, Germany.

"Ceratopogon" pupa Nr. 5
STATZ, 1944c as pl. 11, fig. 91.
Figured specimen 3453; Oligocene; Rott, Rheinland, Germany.

"Ceratopogon" pupa Nr. 6
STATZ, 1944c as pl. 11, fig. 92.
Figured specimen 3454; Oligocene; Rott, Rheinland, Germany.

"Ceratopogon" pupa Nr. 7
STATZ, 1944c as pl. 11, figs. 93-95.
3 figured specimens 3455 (fig. 93); 3456 (fig. 94); 3457 (fig. 95); Oligocene; Rott, Rheinland, Germany.

"Ceratopogon" pupa Nr. 8
STATZ, 1944c as pl. 11, fig. 96.
Figured specimen 3458; Oligocene; Rott, Rheinland, Germany.

"Ceratopogon" pupa Nr. 9
STATZ, 1944c as pl. 11, fig. 97.
Figured specimen 3459; Oligocene; Rott, Rheinland, Germany.

"Ceratopogon" pupa Nr. 10
STATZ, 1944c as pl. 11, fig. 98.
Figured specimen 3460; Oligocene; Rott, Rheinland, Germany.

"Ceratopogon" pupa Nr. 11
STATZ, 1944c as pl. 11, fig. 99.
Figured specimen 3461; Oligocene; Rott, Rheinland, Germany.

"Ceratopogon" pupa Nr. 12
STATZ, 1944c as pl. 11, fig. 100.
Figured specimen 3462; Oligocene; Rott, Rheinland, Germany.

"Ceratopogon" pupa Nr. 13
STATZ, 1944c as pl. 11, fig. 101.
Figured specimen 3463; Oligocene; Rott, Rheinland, Germany.

Culicoides sp.
STATZ, 1941b as fig. 6.
Figured specimen 3464 (MISSING); Oligocene; Rott, Rheinland, Germany.
Culicoides abbreviatiopennis
STATZ, 1944c: 142, pl. 8, fig. 59.
7 syntypes 3465 (pl. 8, fig. 59); 3466-3471 (unfigured; 3471 MISSING); Oligocene; Rott, Rheinland, Germany.

Culicoides ? abdominalis
STATZ, 1944c: 145, pl. 8, fig. 66.
3 syntypes 3472 (pl. 8, fig. 67); 3473-3474 (unfigured); Oligocene; Rott, Rheinland, Germany.

Culicoides ? atatus
STATZ, 1944c: 147, pl. 9, fig. 69.
Holotype 3475; Oligocene; Rott, Rheinland, Germany.

Culicoides austerus
STATZ, 1944c: 144, pl. 7, figs. 48-49; pl. 8, figs. 63-64.
9 syntypes 3476 (pl. 7, fig. 38; pl. 8, fig. 63); 3477 (pl. 7, fig. 49; pl. 8, fig. 64); 3478-3484 (unfigured); Oligocene; Rott, Rheinland, Germany.

Culicoides bicolor
STATZ, 1944c: 146, pl. 8, fig. 68; pl. 9, fig. 70.
8 syntypes 3485 (pl. 8, fig. 68); 3486 (pl. 9, fig. 70); 3487-3492 (unfigured); 3489-3492 (MISSING); Oligocene; Rott, Rheinland, Germany.

Culicoides elongatulus
STATZ, 1944c: 143, pl. 8, figs. 60 and 62.
11 syntypes 3493 (fig. 60); 3494 (fig. 62); 3495-3503 (unfigured); Oligocene; Rott, Rheinland, Germany.

Culicoides ? gracilior
STATZ, 1944c: 143, pl. 8, fig. 61.
3 syntypes 3504 (pl. 8, fig. 61); 3505 (unfigured); 3506 (unfigured; MISSING); Oligocene; Rott, Rheinland, Germany.

Culicoides jecundus
STATZ, 1941b as fig. 8 (nomen nudum).
STATZ, 1944c: 147, pl. 9, figs. 72-74.
4 syntypes 3507 (Statz 1941b, fig. 8; Statz 1944c, pl. 9, figs. 72-73); 3508 (Statz, 1944c, pl. 9, fig. 74); 3509 (unfigured); 3510 (unfigured; MISSING); Oligocene; Rott, Rheinland, Germany.
NOTE: In 1941 Statz figured a specimen with the name Culicoides jecundus with no accompanying description invalidating his later use of the name in 1944.

Culicoides liliputanus
STATZ, 1944c: 142, pl. 8, fig. 58.
3 syntypes 3511 (pl. 8, fig. 58); 3512 and 3513 (unfigured); Oligocene; Rott, Rheinland, Germany.

Culicoides obesus
STATZ, 1944c: 145, pl. 8, fig. 67.
Holotype 3514; Oligocene; Rott, Rheinland, Germany.

Culicoides obscuratus
STATZ, 1944c: 144, pl. 8, fig. 65.
9 syntypes 3515 (pl. 8, fig. 65); 3516-3523 (unfigured; 3522 and 3523 MISSING); Oligocene; Rott, Rheinland, Germany.

Culicoides tenuipennis
STATZ, 1944c: 147, pl. 7, fig. 50; pl. 9, fig. 71.
Holotype 3524; Oligocene; Rott, Rheinland, Germany.

Serromyia sp.
STATZ, 1944c as pl. 9, fig 75.
Figured specimen 3525; Oligocene; Rott, Rheinland, Germany.
Serromyia austera
STATZ, 1941b as fig. 10 (nomen nudum).
Holotype 3526; Oligocene; Rott, Rheinland, Germany.
NOTE: In 1941 Statz figured a specimen with the name Serromyia austera
with no accompanying description invalidating his later use of the name in
1944.

Serromyia colorata
STATZ, 1944c:150, pl. 9, fig. 78.
Holotype 3527; Oligocene; Rott, Rheinland, Germany.

Serromyia spinofemorata
STATZ, 1941b as fig. 9 (nomen nudum).
STATZ, 1944c:151, pl. 10, fig. 81.
Holotype 3528; Oligocene; Rott, Rheinland, Germany.
NOTE: In 1941 Statz figured a specimen with the name Serromyia spinofemorata
with no accompanying description invalidating his later use of the
name in 1944.

Stilobezzia goetzhebueri
STATZ, 1944c:148, pl. 7, fig. 52; pl. 9, fig. 77.
Holotype 3529; Oligocene; Rott, Rheinland, Germany.

Stilobezzia veterana (Meunier, 1920)
STATZ, 1941b as fig. 7.
STATZ, 1944c as pl. 9, fig. 76.
Figured specimen 3530 (MISSING); Oligocene; Rott, Rheinland, Germany.

Family CHIRONOMIDAE

"Orthocladius"♂ Nr. 1
STATZ, 1944c as pl. 5, figs. 35-36.
2 figured specimens 3531 (pl. 5, fig. 35); 3532 (pl. 5, fig. 36; MISSING);
Oligocene; Rott, Rheinland, Germany.

"Orthocladius"♂ Nr. 2
STATZ, 1944e as pl. 5, fig. 37.
Figured specimen 3533; Oligocene; Rott, Rheinland, Germany.

"Orthocladius"♂ Nr. 3
STATZ, 1944c as pl. 5, fig. 38.
Figured specimen 3534; Oligocene; Rott, Rheinland, Germany.

"Orthocladius"♂ Nr. 4
STATZ, 1944c as pl. 6, fig. 39.
Figured specimen 3535; Oligocene; Rott, Rheinland, Germany.

Pelopia ? sp.
STATZ, 1944c as pl. 5, fig. 32.
Figured specimen 3536; Oligocene; Rott, Rheinland, Germany.

Pelopia dorminans (Heyden, 1870)
STATZ, 1944c as pl. 3, figs. 16-21.
6 figured specimens 3537 (fig. 16); 3538 (fig. 17); 3539 (fig. 18); 3540 (fig. 19);
3541 (fig. 20); 3542 (fig. 21); Oligocene; Rott, Rheinland, Germany.

Pelopia ? obscura
STATZ, 1944c:129, pl. 4, figs. 28-29.
10 syntypes 3543 (fig. 28); 3544 (fig. 29); 3545-3552 (unfigured); Oligocene;
Rott, Rheinland, Germany.

Pelopia pagasti
STATZ, 1944c:130, pl. 5 figs. 30-31.
4 syntypes 3553 (fig. 30); 3554 (fig. 31); 3555-3556 (unfigured); Oligocene;
Rott, Rheinland, Germany.
**Pelopia ? paëmon** (Heyden, 1870)
STATZ, 1944c as pl. 5, figs. 33-34.
Figured specimen 3557; Oligocene; Rott, Rheinland, Germany.

**Pelopia thienemannii**
STATZ, 1944c:128, pl. 4, figs. 22-24 and 27.
37 syntypes 3558 (fig. 22); 3559 (fig. 23); 3560 (fig. 24); 3561 (fig. 27);
3562-3594 (unfigured); Oligocene; Rott, Rheinland, Germany.

**Pelopiina (pupa)**
STATZ, 1944c as pl. 6, figs. 40-45.
6 figured specimens 3595 (fig. 40); 3596 (fig. 41); 3597 (fig. 42); 3598
(fig. 43); 3599 (fig. 44); 3600 (fig. 45, MISSING); Oligocene; Rott, Rhein-
land, Germany.

**Pelopiina (exuvia)**
STATZ, 1944c as pl. 6, fig. 46.
Figured specimen 3601; Oligocene; Rott, Rheinland, Germany.

**Procladius ? ? Nr. 1**
STATZ, 1944c as pl. 2, figs. 7-13.
7 figured specimens 3602 (fig. 7); 3603 (fig. 8, MISSING); 3604 (fig. 9,
MISSING); 3605 (fig. 10); 3606 (fig. 11); 3607 (fig. 12, MISSING); 3608
(fig. 13); Oligocene; Rott, Rheinland, Germany.

**Procladius ? ? Nr. 2**
STATZ, 1944c as pl. 3, figs. 14-15.
2 figured specimens 3609 (fig. 14); 3610 (fig. 15); Oligocene; Rott, Rhein-
land, Germany.

Family CHLOROPIDAE

**"Chlorops" anthracinus**
STATZ, 1940b:153, pl. 22, fig. 48; pl. 27, fig. 92.
Holotype 3611; Oligocene; Rott, Rheinland, Germany.

**"Oscinella" dormescens**
STATZ, 1940b:153, pl. 22, fig. 49.
2 syntypes 3612 (pl. 22, fig. 49); 3613 (unfigured); Oligocene; Rott, Rhein-
land, Germany.

Family CLUSIIDAE

**Clusiodes ? petreficata**
STATZ, 1940a:150, pl. 22, fig. 42.
Holotype 3614; Oligocene; Rott, Rheinland, Germany.

Family CULICIDAE

**Anopheles ? rottensis**
STATZ, 1944b:109, pl. 2, fig. 19; pl. 5, fig. 38.
Holotype 3615; Oligocene; Rott, Rheinland, Germany.

**Mansonia martinii**
STATZ, 1941b as fig. 13 (nomen nudum).
STATZ, 1944b:110, pl. 2, fig. 17; pl. 5, fig. 37.
Holotype 3616; Oligocene; Rott, Rheinland, Germany.
NOTE: In 1941 Statz figured a specimen with the name Mansonia martinii
with no accompanying description invalidating his later use of the name in 1944.
**Mansonia varivestita**
STATZ, 1941b as fig. 14 (*nomen nudum*).
STATZ, 1944b:111.
1 syntype 3617 (unfigured); Oligocene; Rott, Rheinland, Germany.
**NOTE 1:** In 1941 Statz figured a specimen with the name *Mansonia varivestita* with no accompanying description invalidating his later use of the name in 1944.
**NOTE 2:** There is a figured syntype (Statz, 1941b, fig. 14; Statz, 1944b, pl. 2, fig. 18; pl. 5, fig. 36) in the Kastenholz collection.

**Family DOLICHOPODIDAE**

**“Dolichopus” minutus**
STATZ, 1940b:136, pl. 20, fig. 17; pl. 25, fig. 70.
Holotype 3618; Oligocene; Rott, Rheinland, Germany.
**NOTE:** The counterplate is in the Kastenholz collection.

**“Dolichopus” scitus**
STATZ, 1940b:136, pl. 20, fig. 18; pl. 24, fig. 68.
Holotype 3619; Oligocene; Rott, Rheinland, Germany.

**Dolichopus spinosus**
STATZ, 1940b:135, pl. 20, fig. 16.
Holotype 3620; Oligocene; Rott, Rheinland, Germany.

**“Onchopygius” gracilior**
STATZ, 1940b:137, pl. 20, fig. 20; pl. 25, fig. 71.
Holotype 3622; Oligocene; Rott, Rheinland, Germany.

**“Onchopygius” oligocoaenicus**
STATZ, 1940b:137, pl. 24, fig. 69.
2 syntypes 3623 (pl. 24, fig. 69); 3624 (unfigured); Oligocene; Rott, Rheinland, Germany.

**“Onchopygius” venustus**
STATZ, 1940b:138, pl. 20, fig. 21; pl. 25, fig. 72.
Holotype 3621; Oligocene; Rott, Rheinland, Germany.

**Sciaspus ? anabilis**
STATZ, 1940b:139, pl. 20, fig. 23.
Holotype 3625; Oligocene; Rott, Rheinland, Germany.

**Sciaspus rottensis**
STATZ, 1940b:139, pl. 21, fig. 24; pl. 25, fig. 74.
Holotype 3626; Oligocene; Rott, Rheinland, Germany.

**Xanthochlorus ? tenellus**
STATZ, 1940b:138, pl. 20, fig. 22; pl. 25, fig. 73.
Holotype 3627; Oligocene; Rott, Rheinland, Germany.
**NOTE:** The unfigured counterplate is in the Kastenholz collection.

**Family DROSOPHILIDAE**

**“Drosophila” blanda**
STATZ, 1940b:152, pl. 22, fig. 47; pl. 27, fig. 90.
Holotype 3628; Oligocene; Rott, Rheinland, Germany.

**“Drosophila” elegans**
STATZ, 1940b:152, pl. 22, fig. 46; pl. 27, fig. 91.
Holotype 3629; Oligocene; Rott, Rheinland, Germany.
Family DRYOMYZIDAE

Dryomyza pelidua
STATZ, 1940b:146, pl. 22, fig. 35; pl. 26, fig. 81.
Holotype 3630; Oligocene; Rott, Rheinland, Germany.

Family EMPIDIDAE

Empis spinifera
STATZ, 1940b:132, pl. 20, fig. 12; pl. 24, fig. 65.
FURST, 1959:16, bottom figure, unnumbered.
Holotype 3631; Oligocene; Rott, Rheinland, Germany.

Empis umbonata
STATZ, 1940b:133, pl. 24, fig. 66.
2 syntypes 3632 (pl. 24, fig. 66); 3633 (unfigured); Oligocene; Rott, Rheinland, Germany.

Hilaria heeri
MEUNIER, 1915b:12, pl. 4, figs. 12-12a.
2 syntypes 4324 (fig. 12); 4325 (fig. 12a); Oligocene; Aix, Provence, France.

Rhamphomyia fulvescens
STATZ, 1940b:133, pl. 20, fig. 14.
Holotype 3640; Oligocene; Rott, Rheinland, Germany.

Rhamphomyia latipennata
STATZ, 1940b:134, text fig. on p. 134.
Holotype 3641; Oligocene; Rott, Rheinland, Germany.

Rhamphomyia rottensis
STATZ, 1940b:135, pl. 24, fig. 67.
6 syntypes 3634 (pl. 24, fig. 67); 3635-3639 (unfigured); Oligocene; Rott, Rheinland, Germany.

Family HELOMYZIDAE

Leria bauckhorni (Meunier, 1915a)
STATZ, 1940b as pl. 22, figs. 40-41; pl. 27, fig. 87.
2 figured specimens 3642 (pl. 22, fig. 41); 3643 (pl. 27, fig. 87); Oligocene; Rott, Rheinland, Germany.

Family HIPPOBOSCIDAE

Ornithoponus rottensis
STATZ, 1940b:154, pl. 22, fig. 50; pl. 27, fig. 93.
STATZ, 1941b as figs. 16-17.
MAA, 1966 as figs. 1-2.
Holotype 3644; Oligocene; Rott, Rheinland, Germany.

Family MYCETOPHILIDAE

Asindulum ? pygmaea
STATZ, 1944a:70, pl. 1, fig. 3; pl. 3, fig. 30.
Holotype 3645; Oligocene; Rott, Rheinland, Germany.

Boletina angustipennis
STATZ, 1944a:78, pl. 2, fig. 18; pl. 5, fig. 43.
Holotype 3646; Oligocene; Rott, Rheinland, Germany.

Boletina brunnescens
STATZ, 1944a:78, pl. 2, fig. 17; pl. 5, fig. 42.
Holotype 3647; Oligocene; Rott, Rheinland, Germany.
Boletina graciosa
STATZ, 1944a:79, pl. 2, fig 19; pl. 5, figs. 44-45.
Holotype 3648; Oligocene; Rott, Rheinland, Germany.

Boletina longicornis
STATZ, 1944a:77, pl. 2, fig. 16; pl. 5, fig. 41.
Holotype 3649; Oligocene; Rott, Rheinland, Germany.

Ditomyia pilosella
STATZ, 1944a:69, pl. 1, fig. 1; pl. 3, fig. 28.
Holotype 3650; Oligocene; Rott, Rheinland, Germany.

Docosia pilosa
STATZ, 1944a:82, pl. 2, fig. 23; pl. 6, fig. 50.
1 syntype 3651; Oligocene; Rott, Rheinland, Germany.
NOTE: The syntype figured as pl. 6, fig. 51 is in the Kastenholz collection.

Dziedzickia ? lepida
STATZ, 1944a:77, pl. 1, fig. 13; pl. 5, fig. 40.
Holotype 3652; Oligocene; Rott, Rheinland, Germany.

Ectrepesthoneura rottensis
STATZ, 1944a:81, pl. 2, fig. 22; pl. 6, fig. 48.
Holotype 3653 (MISSING); Oligocene; Rott, Rheinland, Germany.
NOTE: ? second specimen is in the Kastenholz collection.

Fungivorites problematicum
STATZ, 1944a:85, pl. 7, fig. 56.
Holotype 3654; Oligocene; Rott, Rheinland, Germany.

Leia aberrans
STATZ, 1944a:79, pl. 2, fig. 20; pl. 6, fig. 46.
Holotype 3655; Oligocene; Rott, Rheinland, Germany.

Leia exhumata
STATZ, 1944a:80, pl. 2, fig. 21; pl. 6, fig. 47.
Holotype 3656; Oligocene; Rott, Rheinland, Germany.

Macrocera umbonata
STATZ, 1944a:70, pl. 1, fig. 2; pl. 3, fig. 29.
Holotype 3657; Oligocene; Rott, Rheinland, Germany.

Manota concolor
STATZ, 1944a:71, pl. 1, fig. 4; pl. 3, fig. 32.
Holotype 3658; Oligocene; Rott, Rheinland, Germany.

Mycomyia sp.
STATZ, 1944a as pl. 1, fig. 6; pl. 7, fig. 57.
Figured specimen 3659; Oligocene; Rott, Rheinland, Germany.

Mycomyia fossilis
STATZ, 1944a:73, pl. 1, fig. 7; pl. 3, fig. 33.
Holotype 3660; Oligocene; Rott, Rheinland, Germany.

Mycomyia kuhni
STATZ, 1944a:73, pl. 1, fig. 8; pl. 4, fig. 34.
Holotype 3661; Oligocene; Rott, Rheinland, Germany.

Mycomyia reisingeri
STATZ, 1944a:75, pl. 1, fig. 11; pl. 4, fig. 37.
Holotype 3662; Oligocene; Rott, Rheinland, Germany.

Mycomyia umbonata
STATZ, 1944a:74, pl. 1, fig. 9; pl. 4, fig. 36.
Holotype 3663; Oligocene; Rott, Rheinland, Germany.

Mycomyia unicolor
STATZ, 1944a:71, pl. 1, fig. 5; pl. 3, fig. 31.
Holotype 3664; Oligocene; Rott, Rheinland, Germany.
Phthinia longipoda
STATZ, 1944a:76, pl. 2, fig. 15; pl. 4, fig. 38.
Holotype 3665; Oligocene; Rott, Rheinland, Germany.

Polyxena hastata
STATZ, 1944a:84, pl. 2, fig. 26; pl. 7, fig. 55.
Holotype 3666; Oligocene; Rott, Rheinland, Germany.

Polyxena (Cordyla) rhenana (Meunier, 1923)
STATZ, 1944a as pl. 7, fig. 54.
Figured specimen 3667; Oligocene; Rott, Rheinland, Germany.

Family OPOMYZIDAE

"Opomyza" pelidua
STATZ, 1940b:151, pl. 22, fig. 44; pl. 27, fig. 89.
Holotype 3668; Oligocene; Rott, Rheinland, Germany.

"Opomyza" venusta
STATZ, 1940b:151, pl. 27, fig. 88.
2 syntypes 3669 (pl. 27, fig. 88); 3670 (unfigured); Oligocene; Rott, Rheinland, Germany.

Family PHORIDAE

Phalacrotophora tertiaria
STATZ, 1940b:140, pl. 21, fig. 25; pl. 25, fig. 75.
Holotype 3671; Oligocene; Rott, Rheinland, Germany.

Family PLATYPEZIDAE

Opetia atra
STATZ, 1940b:141, pl. 21, fig. 26.
Holotype 3672; Oligocene; Rott, Rheinland, Germany.

Family RHAGIONIDAE

Chrysopilus stigmaticus
STATZ, 1940b:129, pl. 19, figs. 6-7.
Holotype 3673; Oligocene; Rott, Rheinland, Germany.

Family SCATOPHAGIDAE

Norellisoma setaria
STATZ, 1940b:145, pl. 21, fig. 33.
Holotype 3674; Oligocene; Rott, Rheinland, Germany.

Scopeuma punctata
STATZ, 1940b:146, pl. 22, fig. 34; pl. 26, fig. 80.
Holotype 3675; Oligocene; Rott, Rheinland, Germany.

Family SCIARIDAE

Lycoria ♂ Nr. 3
STATZ, 1944c as pl. 13, fig. 127; pl. 17, fig. 153.
Figured specimen 3676; Oligocene; Rott, Rheinland, Germany.

Lycoria amicula
STATZ, 1944c:176, pl. 17, fig. 152.
4 syntypes 3677 (pl. 17, fig. 152); 3678-3679 (unfigured); 3680 (unfigured; MISSING); Oligocene; Rott, Rheinland, Germany.
Lycoria antennaria
STATZ, 1944c:169, pl. 15, fig. 134.
2 syntypes 3681 (pl. 15, fig. 134); 3682 (unfigured; MISSING); Oligocene; Rott, Rheinland, Germany.

Lycoria aulica
STATZ, 1944c:165, pl. 14, fig. 128.
12 syntypes 3683 (pl. 14, fig. 128); 3684-3694 (unfigured); 3693 and 3694 (MISSING); Oligocene; Rott, Rheinland, Germany.

Lycoria austera
STATZ, 1944c:166, pl. 14, fig. 131.
2 syntypes 3695 (pl. 14, fig. 131); 3696 (unfigured); Oligocene; Rott, Rheinland, Germany.

Lycoria bella
STATZ, 1944c:177, pl. 17, fig. 149.
5 syntypes 3697 (pl. 17, fig. 149); 3698-3701 (unfigured); Oligocene; Rott, Rheinland, Germany.
NOTE: One additional syntype is in the Kastenholz collection.

Lycoria bicolora
STATZ, 1944c:173, pl. 16, fig. 144.
3 syntypes 3702 (pl. 16, fig. 144); 3703-3704 (unfigured); Oligocene; Rott, Rheinland, Germany.

Lycoria compta
STATZ, 1944c:174, pl. 16, fig. 143.
2 syntypes 3705 (pl. 16, fig. 143); 3706 (unfigured); Oligocene; Rott, Rheinland, Germany.

Lycoria cryptocephala
STATZ, 1944c:168, pl. 12, fig. 107; pl. 14, fig. 133.
Holotype 3707; Oligocene; Rott, Rheinland, Germany.

Lycoria exilis
STATZ, 1944c:178, pl. 13, fig. 126; pl. 17, fig. 150.
Holotype 3708; Oligocene; Rott, Rheinland, Germany.

Lycoria femuralis
STATZ, 1944c:175, pl. 13, fig. 120; pl. 16, fig. 146.
Holotype 3709; Oligocene; Rott, Rheinland, Germany.

Lycoria gracilenta
STATZ, 1944c:172, pl. 13, fig. 116; pl. 16, fig. 142.
Holotype 3710; (pl. 13, fig. 116; pl. 16, fig. 142); 3 paratypes 3711-3713 (unfigured); Oligocene; Rott, Rheinland, Germany.

Lycoria gracilior
STATZ, 1944c:176, pl. 13, fig. 123; pl. 17, fig. 147.
Holotype 3714; Oligocene; Rott, Rheinland, Germany.

Lycoria jacunda
STATZ, 1944c:170, pl. 15, fig. 140.
3 syntypes 3715 (pl. 15, fig. 140); 3716-3717 (unfigured); Oligocene; Rott, Rheinland, Germany.

Lycoria laticornis
STATZ, 1944c:169, pl. 12, fig. 110; pl. 15, fig. 137.
Holotype 3718; Oligocene; Rott, Rheinland, Germany.

Lycoria lengersdorfi
STATZ, 1944c:172, pl. 16, fig. 141.
3 syntypes 3719 (pl. 16, fig. 141); 3720-3721 (unfigured); Oligocene; Rott, Rheinland, Germany.
**Lycoria longa**

STATZ, 1944c:168.  
2 paratypes 3722-3723 (unfigured); Oligocene; Rott, Rheinland, Germany.  
NOTE: The holotype (pl. 15, fig. 135) is in the Kastenholz collection.

**Lycoria lugens**

STATZ, 1944c:173, pl. 13, fig. 117; pl. 16, fig. 145.  
Holotype 3724; Oligocene; Rott, Rheinland, Germany.

**Lycoria melanopa**

STATZ, 1944c:171, pl. 13, fig. 114; pl. 15, fig. 138.  
Holotype 3725; Oligocene; Rott, Rheinland, Germany.

**Lycoria minuscula**

STATZ, 1944c:177, pl. 13, fig. 125; pl. 17, fig. 151.  
Holotype 3726; Oligocene; Rott, Rheinland, Germany.

**Lycoria ovalipennata**

STATZ, 1944c:171, pl. 12, fig. 113; pl. 15, fig. 139.  
Holotype 3727; Oligocene; Rott, Rheinland, Germany.

**Lycoria pelidua**

STATZ, 1944c:167, pl. 14, fig. 130.  
9 syntypes 3728 (pl. 14, fig. 130); 3729-3736 (unfigured); Oligocene; Rott, Rheinland, Germany.

**Lycoria pennata**

STATZ, 1944c:167, pl. 14, fig. 132.  
2 syntypes 3737 (pl. 14, fig. 132); 3738 (unfigured); Oligocene; Rott, Rheinland, Germany.

**Lycoria thoracica**

STATZ, 1944c:175, pl. 13, fig. 121; pl. 17, fig. 148.  
Holotype 3739; Oligocene; Rott, Rheinland, Germany.

**Lycoria weylandi**

STATZ, 1944c:165, pl. 14, fig. 129.  
1 syntype 3740 (pl. 12, fig. 129); Oligocene; Rott, Rheinland, Germany.  
NOTE: An additional syntype is in the Heimatmuseum der Stadt Sieburg.

**Family SEPSIDAE**

**Sepsis ? atra**

STATZ, 1940b:147, pl. 22, fig. 37; pl. 26, fig. 83.  
Holotype 3741; Oligocene; Rott, Rheinland, Germany.

**Sepsis ? bicolorata**

STATZ, 1940b:147, pl. 22, fig. 36; pl. 26, fig. 82.  
Holotype 3742; Oligocene; Rott, Rheinland, Germany.

**Sepsis ? ignobilis**

STATZ, 1940b:148, pl. 26, fig. 84.  
4 syntypes 3743 (pl. 26, fig. 84); 3744-3746 (unfigured); Oligocene; Rott, Rheinland, Germany.

**Family STRATOMYIIDAE**

**Eulalia sp. Nr. 1**

STATZ, 1940b as pl. 19, fig. 3; pl. 23, figs. 52-54.  
4 figured specimens 3747 (pl. 19, fig. 3); 3748 (pl. 23, fig. 52); 3749 (pl. 23, fig. 53); 3750 (pl. 23, fig. 54); Oligocene; Rott, Rheinland, Germany.
Eulalia sp. Nr. 2
STATZ, 1940b as pl. 19, fig. 4; p. 23, figs. 55-56.
3 figured specimens 3751 (pl. 19, fig. 4); 3752 (pl. 23, fig. 55); 3753 (pl. 23, fig. 56); Oligocene; Rott, Rheinland, Germany.

Eulalia sp. Nr. 3
STATZ, 1940b as pl. 23, fig. 57.
Figured specimen 3754; Oligocene; Rott, Rheinland, Germany.

Hermione sp.
STATZ, 1940b as pl. 23, fig. 58.
Figured specimen 3755; Oligocene; Rott, Rheinland, Germany.

Stratiomya sp.
STATZ, 1940b as pl. 19, fig. 2; pl. 23, fig. 51.
2 figured specimens 3756 (pl. 19, fig. 2); 3757 (pl. 23, fig. 51); Oligocene; Rott, Rheinland, Germany.

"Stratiomyia" pentadiscalia
STATZ, 1940b:124, pl. 19, fig. 1; pl. 23, fig. 59.
Holotype 3758; Oligocene; Rott, Rheinland, Germany.

Family SYRPHIDAE

Chilosis picata
STATZ, 1940b:141.
Holotype 3759; Oligocene; Rott, Rheinland, Germany.
NOTE: The figured counterplate (pl. 21, fig. 27) is in the Kastenholz collection.

Epistrophe kastenholzi
STATZ, 1940b:142, pl. 21, fig. 28.
Holotype 3760; Oligocene; Rott, Rheinland, Germany.

"Eristalis" sp.
STATZ, 1940b as pl. 25, fig. 76.
Figured specimen 3761; Oligocene; Rott, Rheinland, Germany.

Myiolepta elisabethae
STATZ, 1940b:144, pl. 21, fig. 31; pl. 26, fig. 79.
Holotype 3762; Oligocene; Rott, Rheinland, Germany.

Spilomyia sp.
STATZ, 1940b as pl. 21, fig. 30.
Figured specimen 3763; Oligocene; Rott, Rheinland, Germany.

Syrphus aeneus
STATZ, 1940b:142, pl. 21, fig. 29.
Holotype 3764; Oligocene; Rott, Rheinland, Germany.
NOTE: The counterplate is in the Kastenholz collection.

Temnostoma sacki
STATZ, 1940b:145, pl. 21, fig. 32; pl. 25, fig. 77.
Holotype 3765; Oligocene; Rott, Rheinland, Germany.

Tropidia sp.
STATZ, 1940b as pl. 26, fig. 78.
Figured specimen 3766; Oligocene; Rott, Rheinland, Germany.

Family TABANIDAE

Tabanus fulvescens
STATZ, 1940b:130, pl. 19, fig. 8; pl. 24, fig. 63.
STATZ, 1941b as fig. 15.
Holotype 3767; Oligocene; Rott, Rheinland, Germany.
Family THEREVIDAE

*Paraclia tarsalis*
STATZ, 1940b: 130, pl. 19, fig. 9; pl. 24, fig. 64.
Holotype 3768; Oligocene; Rott, Rheinland, Germany.

Family TIPULIDAE

*Dactylolabis tenuis*
STATZ, 1944b: 99, pl. 1, fig. 6; pl. 4, fig. 27.
Holotype 3769; Oligocene; Rott, Rheinland, Germany.

*Dicranopycha rottensis*
STATZ, 1944b: 95, pl. 1, fig. 2; pl. 3, fig. 22.
Holotype 3770; Oligocene; Rott, Rheinland, Germany.

*Elephantomyia weigandi*
STATZ, 1934b: 97, figs. 4-5.
Holotype 3771; Oligocene; Rott, Rheinland, Germany.

*Erioptera ? pagastr*
STATZ, 1944b: 97, pl. 1, fig. 5; pl. 3, fig. 25.
Holotype 3772; Oligocene; Rott, Rheinland, Germany.

*Gonomyia munda*
STATZ, 1944b: 96, pl. 1, fig. 3; pl. 3, fig. 21.
Holotype 3773; Oligocene; Rott, Rheinland, Germany.

*Helius tenera*
STATZ, 1944b: 95, pl. 1, fig. 1; pl. 3, fig. 20.
Holotype 3774; Oligocene; Rott, Rheinland, Germany.

*Limnobia antiqua*
STATZ, 1934b: 98, fig. 7.
Holotype 3775; Oligocene; Rott, Rheinland, Germany.

*Limnobia horioni*
STATZ, 1934b: 98, fig. 6.
Holotype 3776; Oligocene; Rott, Rheinland, Germany.

*Limnophila sp. Nr. 1*
STATZ, 1944b as pl. 1, fig. 9; pl. 3, fig. 23.
Figured specimen 3777 (MISSING); Oligocene; Rott, Rheinland, Germany.

*Limnophila sp. Nr. 2*
STATZ, 1944b as pl. 1, fig. 10; pl. 4, fig. 29.
Figured specimen 3778; Oligocene; Rott, Rheinland, Germany.

*Limnophila sp. Nr. 3*
STATZ, 1944b as pl. 2, fig. 14; pl. 4, fig. 30.
Figured specimen 3779; Oligocene; Rott, Rheinland, Germany.

*Limnophila sp. Nr. 4*
STATZ, 1944b as pl. 2, fig. 11; pl. 4, fig. 32.
Figured specimens 3780 (MISSING); Oligocene; Rott, Rheinland, Germany.

*Limnophila ? pterotrichia*
STATZ, 1934b: 103, fig. 13.
Holotype 3781; Oligocene; Rott, Rheinland, Germany.

*Limnophila robusta*
STATZ, 1934b: 102, fig. 12.
Holotype 3782; Oligocene; Rott, Rheinland, Germany.

*Limnophila unbonata*
STATZ, 1944b: 99, pl. 1, fig. 7; pl. 4, fig. 28.
Holotype 3783; Oligocene; Rott, Rheinland, Germany.
**Limnophila veterana**  
STATZ, 1934b:102, fig. 11.  
Holotype 3784; Oligocene; Rott, Rheinland, Germany.

**Rhabdomastix oligocaenica**  
STATZ, 1944b:98, pl. 1, fig. 8; pl. 4, fig. 26.  
Holotype 3785; Oligocene; Rott, Rheinland, Germany.

**Tipula sp. Nr. 1**  
STATZ, 1944b as pl. 2, fig. 16; pl. 5, fig. 34.  
Figured specimen 3786; Oligocene; Rott, Rheinland, Germany.

**Tipula sp. Nr. 2**  
STATZ, 1944b as pl. 2, fig. 12; pl. 5, fig. 33.  
Figured specimen 3787 (MISSING); Oligocene; Rott, Rheinland, Germany.

**Tipula sp. Nr. 3**  
STATZ, 1944b as pl. 2, fig. 13; pl. 5, fig. 35.  
Figured specimen 3788 (MISSING); Oligocene; Rott, Rheinland, Germany.

**Tipula bouata**  
MEUNIER, 1915b:14; pl. 4, fig. 15.  
Holotype 4326; Oligocene; Aix, Provence, France.

**Tipula maximu**  
STATZ, 1934b:95, figs. 1-3.  
Holotype 3789; Oligocene; Rott, Rheinland, Germany.

**Tipula peusi**  
STATZ, 1944b:101, pl. 2, fig. 15; pl. 4, fig. 31.  
Holotype 3790; Oligocene; Rott, Rheinland, Germany.

**Ula rottensis**  
STATZ, 1934b:100, fig. 9.  
Holotype 3791; Oligocene; Rott, Rheinland, Germany.

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**Family** TRICHOCERIDAE

**Trichocera miocaenica**  
STATZ, 1934b:100, fig. 10.  
Holotype: 3792; Oligocene; Rott, Rheinland, Germany.

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**Family** TYLIDAE

**Trepidaria ? rottensis**  
STATZ, 1940b:148, pl. 22, fig. 39; pl. 27, fig. 86.  
Holotype 3793 (pl. 22, fig. 39; pl. 27, fig. 86); Paratype 3794 (unfigured); Oligocene; Rott, Rheinland, Germany.

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**Order** COLEOPTERA  
**Family** CARABIDAE

**Bembidion (Ochthedomus) davidae**  
PIERCE, 1944a:7, pl. 1, figs. a-c.  
Holotype 2590; Lower Miocene; W bank of the Cuyama River near the junction with Husana Creek, San Luis Obispo County, California.

**Bembidion everestiae**  
PIERCE, 1944b:11, pl. 2; pl. 3, figs. a-b.  
Holotype 2591; Lower Miocene; near Rosedale, 6 mi W of Bakersfield, Kern County, California.
Elaphrus clarvillei lynnii
PIERCE. 1948a:52, pl. 12.
Holotype 2948; Pleistocene; Lynn Creek, north of Vancouver, British Columbia, Canada.

Elaphrus ruscinus foveatus
PIERCE. 1948c:54, pl. 13, figs. 1-3.
Holotype 2949; Pleistocene; asphalt deposit at McKittrick, Kern County, California.

Notiophilus vancouleri
PIERCE. 1950b:5, pl. 2, figs. 1-3.
Holotype 3056; Pleistocene; Lynn Creek, N of Vancouver, British Columbia, Canada.

Family CERAMBYCIDAES

Anaesthetis ? magnificus
STATZ. 1938c:176, figs. 5-6.
Holotype 3795; Oligocene; Rott, Rheinland, Germany.

Haplocnemia sophia
STATZ. 1938c:175, fig. 2.
Holotype 3796; Oligocene; Rott, Rheinland, Germany.

Leptura longipennis
STATZ. 1938c:175, fig. 1.
Holotype 3797; Oligocene; Rott, Rheinland, Germany.

Superda ? petrorum
STATZ. 1938c:177, fig. 3.
Holotype 3798; Oligocene; Rott, Rheinland, Germany.
NOTE: The unfigured counterplate is in the Kastenholz collection.

Tetrops rotteni
STATZ. 1938c:178, fig. 4.
Holotype 3799; Oligocene; Rott, Rheinland, Germany.

Family CHRYSMELIDAE

Donacia (Donacia) cordovae
PIERCE. 1950c:8 (unfigured).
Holotype 2887; 3 paratypes 2888-2890; Pleistocene; Cordova Bay, Vancouver Island, British Columbia, Canada.

Donacia (Donacia) draycoti
PIERCE. 1950c:7 (unfigured).
Holotype 2891; 54 paratypes 2892-2945; Pleistocene; Lynn Creek, N of Vancouver, British Columbia, Canada.

Donacia (Donacia) lynnii
PIERCE. 1950c:8 (unfigured).
Holotype 2946; paratype 2947; Oligocene; Lynn Creek, N of Vancouver, British Columbia, Canada.

Family COCCINELLIDAE

Coccinella sp.
FURST. 1959:14, p. 14, top figure, unnumbered.
Figured specimen 3800 (MISSING); Oligocene; Rott, Rheinland, Germany.
Family CURCULIONIDAE

*Rhyncolus kathrynæ*

Holotype 3084; Pliocene; Sam Swartz Ranch, Fernley, Lyon County, Nevada.

*Rhyssematus miocenæ*

PIERCÉ, 1965:157, fig. 1.
Holotype 3070; Upper Miocene; Woodcrest Drive, Sherman Oaks, Los Angeles County, California.

Family DRYOPIDAE

*Helmis decoratus*

STATZ, 1938b, fig. 26 (both plate and counterplate figured); (nomen nudum).
STATZ, 1939:68, pl. 20, figs. 92-94.
Holotype 3801; Oligocene; Rott, Rheinland, Germany.
NOTE: In 1938 Statz figured a specimen with the name *Helmis decoratus* with no accompanying description invalidating his later use of the name in 1944.

Family DYTISCIDAE

*Dytiscites* sp. (larva)

STATZ, 1939 as pl. 16, fig. 73.
Figured specimen 3802; Oligocene; Rott, Rheinland, Germany.

*Agabus hochi*

STATZ, 1938b as fig. 21; (nomen nudum).
STATZ, 1939:56, pl. 13, figs. 61-62.
Holotype 3803; Oligocene; Rott, Rheinland, Germany.
NOTE: In 1938 Statz figured a specimen with the name *Agabus hochi* with no accompanying description invalidating his later use of the name in 1944.

*Hydroporus* ?*maculatus*

STATZ, 1939:55, pl. 12, fig. 58.
Holotype 3804; Oligocene; Rott, Rheinland, Germany.

*Hydroporus* multipunctatus

STATZ, 1939:55, pl. 13, figs. 59-60.
Holotype 3805; Oligocene; Rott, Rheinland, Germany.

*Oreodites cryptolineatus*

STATZ, 1938b as fig. 20 (2 specimens figured); (nomen nudum).
STATZ, 1939:53, pl. 11, figs. 51-54; pl. 12, figs. 55-57.
76 syntypes 3806 (Statz, 1938b, fig. 20, ventral view; Statz, 1939, pl. 12, fig. 56); 3807 (Statz, 1938b, fig. 20, dorsal view); 3808 (Statz, 1939, pl. 11, fig. 51); 3809 (pl. 11, fig. 52); 3810 (pl. 11, fig. 53); 3811 (pl. 11, fig. 54); 3812 (pl. 12, fig. 55); 3813 (pl. 12, fig. 57); 3814-3881 (unfigured); Oligocene; Rott, Rheinland, Germany.
NOTE: In 1938 Statz figured two specimens with the name *Oreodites cryptolineatus* with no accompanying description invalidating his later use of the name in 1944.

Family GYRINIDAE

*Palaeogyrinus strigatus* Schlechtendal, 1894

STATZ, 1938b as fig. 22.
STATZ, 1939 as pl. 15, figs. 69-72.
5 figured specimens 3882 (Statz, 1938b, fig. 22; MISSING); 3883 (Statz, 1939, pl. 15, figs. 67-68; MISSING); 3884 (Statz, 1939, pl. 15, fig. 69); 3885 (Statz, 1939, pl. 15, fig. 70); 3886 (Statz, 1939, pl. 15, figs. 71-72); Oligocene; Rott, Rheinland, Germany.
Family HYDROPHILIDAE

*Berosus capitatus*  
STATZ, 1939:62, pl. 17, figs. 77-78.  
Holotype 3887; Oligocene; Rott, Rheinland, Germany.

*Berosus morticus* (Heyden, 1866)  
STATZ, 1938b as fig. 24.  
STATZ, 1939 as pl. 16, figs. 74 and 76.  
3 figured specimens 3888 (Statz, 1938b, fig. 24); 3889 (Statz, 1939, fig. 74); 3890 (Statz, 1939, fig. 76); Oligocene; Rott, Rheinland, Germany.

*Cymbiododyta ? austerus*  
STATZ, 1939:66, pl. 19, fig. 88.  
Holotype 3891; Oligocene; Rott, Rheinland, Germany.

*Hydrophilus fraternus* Heyden, 1859  
STATZ, 1939 as pl. 19, figs. 85-87.  
2 figured specimens 3892 (fig. 85); 3893 (fig. 86-87); Oligocene; Rott, Rheinland, Germany.

*Hydrophilus neptunus* (Heyden, 1866)  
STATZ, 1939 as pl. 18, figs. 82-84.  
2 figured specimens 3894 (figs. 82-83); 3895 (fig. 84); Oligocene; Rott, Rheinland, Germany.

*Hydrous ? ebeninus*  
STATZ, 1939:64.  
Syntype 3896 (unfigured); Oligocene; Rott, Rheinland, Germany.  
NOTE: There is a figured (pl. 18, fig. 81) syntype in the Kastenholz collection.

*Hydrous rottensis*  
STATZ, 1938b as fig. 23 (both plate and counterplate figured); *(nomen nudum).*  
STATZ, 1939:63, pl. 17, figs. 79-80.  
Holotype 3897; Oligocene; Rott, Rheinland, Germany.  
NOTE: In 1938 Statz figured a specimen with the name *Hydrous rottensis* with an accompanying description invalidating his later use of the name in 1944.

*Paracycnums excitatus* (Heyden, 1866)  
STATZ, 1938b as fig. 25.  
STATZ, 1939 as pl. 19, fig. 89; pl. 20, figs. 90-91.  
4 figured specimens 3898 (Statz, 1938, fig. 25; MISSING); 3899 (Statz, 1939, pl. 19, fig. 89); 3900 (Statz, 1939, pl. 20, fig. 90); 3901 (Statz, 1939, pl. 20, fig. 91); Oligocene; Rott, Rheinland, Germany.

Family LUCANIDAE

*Ceruchites hahnei*  
STATZ, 1952:5, pl. 1, fig. 4.  
Holotype 3902; Oligocene; Rott, Rheinland, Germany.

Family MORDELLIDAE

*Mordella indata*  
STATZ, 1952:3, pl. 1, figs. 1-2.  
2 syntypes 3903 (fig. 1); 3904 (fig. 2); Oligocene; Rott, Rheinland, Germany.

*Mordella nigripilosa*  
STATZ, 1952:4, pl. 1, fig. 3.  
Holotype 3905; Oligocene; Rott, Rheinland, Germany.
Family **PTILIIDAE**

*Ptilium tertiarium*

HORION in STATZ and HORIZON, 1937:8, figs. 1-4.
Holotype 3906; Oligocene; Rott, Rheinland, Germany.

Family **SCARABAEIDAE**

*Aphodius helvolus*

STATZ, 1952:6, pl. 1, fig. 6.
Holotype 3907; Oligocene; Rott, Rheinland, Germany.

*Canthon practiculus vetustus*

PIERC, 1946a:122 (unfigured).
Holotype 2592; paratype 2593; Pleistocene; Pit 81, Rancho La Brea, Los Angeles, Los Angeles County, California.

*Canthon simplex antiquus*

PIERC, 1946a:120, pl. 10, figs. 1-3.
Holotype 2594 (pl. 10, figs. 2-3); 4 paratypes 2595 (pl. 10, fig. 1); paratype 2596-2598 (unfigured); Pleistocene; Pit A, Rancho La Brea, Los Angeles, Los Angeles County, California.

*Copris pristinus*

PIERC, 1946a:124, pl. 11, figs. 4-9; pl. 13, figs. 18-19.
Holotype 2850 (pl. 11, figs. 4-9); paratype (pl. 13, fig. 19); 39 paratypes, 2850 and 2853-2878 and 4329-4333 from Pit A; and 2851 and 2879-2883 and 4328 from Pit 16; 2884-2886 from Pit 13-183; all Pleistocene; Rancho La Brea, Los Angeles, Los Angeles County, California.

*Geotrupes ? sp. a*

STATZ, 1952 as pl. 2, fig. 2.
Figured specimen 3908; Oligocene; Rott, Rheinland, Germany.

*Geotrupes ? sp. b*

STATZ, 1952 as pl. 2, fig. 3.
Figured specimen 3909; Oligocene; Rott, Rheinland, Germany.

*Geotrupes rotensis*

STATZ, 1952:7, pl. 2, fig. 1.
Holotype 3910; Oligocene; Rott, Rheinland, Germany.

*Maladera ? spinithibialis*

STATZ, 1952:9, pl. 2, fig. 4.
Holotype 3911; Oligocene; Rott, Rheinland, Germany.

*Melolontha ? sp. *

STATZ, 1952 as pl. 2, fig. 6.
Figured specimen 3912; Oligocene; Rott, Rheinland, Germany.

*Onthophagus everestae*

PIERC, 1946a:131, pl. 12, figs. 15-17.
Holotype 3057 (pl. 12, figs. 15-16); paratype 3058 (pl. 12, fig. 17); Pleistocene; Pit 81, Rancho La Brea, Los Angeles, Los Angeles County, California.

*Onthophagus mulleri*

STATZ, 1952:8, pl. 2, fig. 5.
Holotype 3913; Oligocene; Rott, Rheinland, Germany.

*Palaeocopris labreae*

PIERC, 1946a:130, pl. 11, figs. 10-13.
Holotype 3059 (figs. 10-11); 4 paratypes 3060 (fig. 12); 3061 (fig. 13); 3062 (fig. 14); 3063 (unfigured); Pleistocene; Pit 81, Rancho La Brea, Los Angeles, Los Angeles County, California.
Serica kanakoffi
Holotype 3071; Pleistocene; Pit 81, Rancho La Brea, Los Angeles, Los Angeles County, California.

Family SILPHIDAE

Nicrophorus guttulus labrae
PIECE, 1949:63, pl. 9, fig. 7; pl. 10, fig. 9.
136 syntypes 2950 (pl. 9, fig. 7); 2951 (pl. 10, fig. 9); 2952-2979 and 4334-4375 (unfigured); Pleistocene; 2950-2979 and 4334-4353 from Pit A; 2980-2981 and 4354 from Pit B; 2982-3044 and 4355 from Pit X; 3045 from Pit 28; 3046 from Pit 37; 4356-4361 from Pit 81; 4362-4374 from Pit Bliss 29; 4375 from an unknown pit, all are from Rancho La Brea, Los Angeles, Los Angeles County, California.

Nicrophorus guttulus pincetostriatus
PIECE, 1949:66 (unfigured).
Holotype 3047; Pleistocene; Pit A, Rancho La Brea, Los Angeles, Los Angeles County, California.

Nicrophorus investigator alpha
PIECE, 1949:67, pl. 10, fig. 13.
5 syntypes 3048 (pl. 10, fig. 13); 3049-3052 (unfigured); Pleistocene; Pit A, Rancho La Brea, Los Angeles, Los Angeles County, California.

Nicrophorus investigator latifrons
PIECE, 1949:67, pl. 10, fig. 14.
Holotype 3053; Pleistocene; Rancho La Brea, Los Angeles, Los Angeles County, California.

Nicrophorus mckittricki
PIECE, 1949, pl. 10, fig. 11.
Holotype 3054; Pleistocene; Site 3, Mckittrick, Kern County, California.

Nicrophorus obtusiscutellum
PIECE, 1949: 67, pl. 10, fig. 12.
Holotype 3055; Pleistocene; Pit A, Rancho La Brea, Los Angeles, Los Angeles County, California.

Family TENERBRIONIDAE

Apsena labrae
PIECE, 1954b:98, pl. 23, figs. 6-7.
Holotype 2588 (pl. 23, figs. 6-7); 2598 paratype (unfigured); Pleistocene; Pit B, Rancho La Brea, Los Angeles, Los Angeles County, California.

Coniontis abdominalis caseyi
PIECE, 1954c:145 (unfigured).
Holotype 2599; 108 paratypes 2600-2707; Pleistocene; 2599-2620 from Pit A; 2621-2625 from Pit B; 2626-2640 from Pit C; 2641-2663 from Pit X; 2664-2707 from Pit Bliss 29; all are from Rancho La Brea, Los Angeles, Los Angeles County, California.

Coniontis abdominalis fragmans
PIECE, 1954c:148, pl. 42, fig. 2.
Holotype 2708, Pleistocene; Rancho La Brea, Los Angeles, Los Angeles County, California.
**Conionitis abdominalis labreae**

PIERCE, 1954c: 146, pl. 41, figs. 1-2; pl. 42, figs. 3 and 10-13.

Holotype 2709 (pl. 41, fig. 1); 41 paratypes 2710 (pl. 42, figs. 10-13); 2711-2747; Pleistocene; 2709-2746 from Pit Bliss 29; 2747 from Pit 28; all are from Rancho La Brea, Los Angeles, Los Angeles County, California.

**NOTE:** I am unable to match the remaining drawings and paratypes.

**Conionitis blissi**

PIERCE, 1954c: 149, pl. 42, fig. 16.

Holotype 2748 (pl. 42, fig. 16); 13 paratypes, 2749-2761; Pleistocene; 2748 and 2759-2761 from Pit Bliss 29; 2749 from Pit A; 2750-2754 from Pit B, 2755-2757 from Pit X; 2758 from Pit 9; all are from Rancho La Brea, Los Angeles, Los Angeles County, California.

**Conionitis pectoralis interrupta**

PIERCE, 1954c: 154, pl. 42, figs. 15-15a.

Holotype 2763 (MISSING); 12 paratypes 2753-2764 (MISSING); Pleistocene; 2753 from Pit A; 2754-2758 from Pit B; 2759-2760 from Pit X; 2761 from Pit 9; 2762-2764 from Pit Bliss 29; all from Rancho La Brea, Los Angeles, Los Angeles County, California.

**Conionitis pectoralis paraeelliptica**

PIERCE, 1954c: 153, pl. 42, fig. 7.

Holotype 2775 (pl. 42, fig. 7); 12 paratypes 2776-2787; Pleistocene; Rancho La Brea, Los Angeles, Los Angeles County, California.

**Conionitis remnans**

PIERCE, 1954c: 155, pl. 41, figs. 4-6.

Holotype 2788; Pleistocene; Pit B, Rancho La Brea, Los Angeles, Los Angeles County, California.

**Conionitis tristis alpha**

PIERCE, 1954c: 148, pl. 42, fig. 1.

Holotype 2798 (pl. 42, fig. 1); 56 paratypes 2790-2845; Pleistocene; Rancho La Brea, Los Angeles, Los Angeles County, California.

**Conionitis tristis asphalhti**

PIERCE, 1954c: 149, pl. 42, fig. 6.

**HOLOTYPE** 2846; paratype 2847; Pleistocene; Pit 9, Rancho La Brea, Los Angeles, Los Angeles County, California.

**NOTE:** I am unable to match the specimens with the drawing.

**Conionitis tristis latigula**

PIERCE, 1954c: 149, pl. 42, fig. 5.

Holotype 2848; paratype 2849; Pleistocene; Pit Bliss 29, Rancho La Brea, Los Angeles, Los Angeles County, California.

**NOTE:** I am unable to match the specimens with the drawing.

**Parasida mckittricki**

PIERCE, 1954a: 43, pl. 8, figs. 4-5.

Holotype 3064 (pl. 8, figs. 4-5); 5 paratypes 3065-3069 (unfigured); Pleistocene; 3064-3065 from Site 4; 3066-3069 from Site 3; all from McKittrick, Kern County, California.
Order HYMENOPTERA
Family APIDAE

**Synapsis dormitans** (Heyden, 1862)
- STATZ, 1931 as fig. 9.
- ALFONSUS, 1932:275 (unnumbered figure).
- WATSON, 1933:48 (unnumbered figure).
- STATZ, 1934a as fig. 2.
- FURST, 1959, pl. 13 (unnumbered figure).
- 5 figured specimens 3914 (Statz, 1931, fig. 5); 3915 (Statz, 1934a, figs. 1, 5-6; Statz, 1941a:108); 3916 (Statz, 1931, fig. 9; Alfonsus, 1932:275; Watson, 1933:48; Statz, 1934a, fig 2; Statz, 1941a:10; Furst, 1959:10; Furst, 1959:13); 3917 (Statz, 1941a:105; MISSING); 3918 (Statz, 1941a:112; MISSING); Oligocene; Rott, Rheinland, Germany.

**Synapsis henshawi** (Cockerell, 1907)
- STATZ, 1934a as figs. 5-6.
- STATZ, 1941a:103 (unnumbered).
- Figured specimen 3919 (MISSING); Oligocene; Rott, Rheinland, Germany.

**Synapsis kaschkei**
- STATZ, 1931:50, figs. 10-11.
- STATZ, 1934a as fig. 3.
- STATZ, 1941a:109, bottom fig. (unnumbered).
- Holotype 3920 (Statz, 1931, fig. 10-11); figured specimen 3921 (Statz, 1934a, fig. 3; 1941a, pl. 109, bottom fig.); Oligocene; Rott, Rheinland, Germany.

**Xylocopa friesei**
- STATZ, 1936b:284, pl. 13, fig. 37.
- Holotype 3922; Oligocene; Rott, Rheinland, Germany.

Family BETHYLIDAE

**Eypis ? tennellus**
- STATZ, 1938d:107, pl. 14, fig. 46.
- Holotype 3923; Oligocene; Rott, Rheinland, Germany.

Family BRACONIDAE

**Alysa latifrons**
- STATZ, 1936b:279, pl. 9, fig. 27.
- Holotype 3924; Oligocene; Rott, Rheinland, Germany.

**Apaneles concinna**
- STATZ, 1938d:83, pl. 8, fig. 8.
- Holotype 3925; Oligocene; Rott, Rheinland, Germany.

**Apaneles macrophthalmus**
- STATZ, 1938d:82, pl. 8, fig. 7.
- Holotype 3926; Oligocene; Rott, Rheinland, Germany.

**Aspicolpus longicorinus**
- STATZ, 1936b:277, pl. 8, fig. 25.
- Holotype 3927; Oligocene; Rott, Rheinland, Germany.

**Aspiota ? stigmalineata**
- STATZ, 1938d:88, pl. 9, fig. 16.
- Holotype 3928; Oligocene; Rott, Rheinland, Germany.

**Blacus crassicapitatus**
- STATZ, 1938d:81, pl. 7, fig. 5.
- Holotype 3929; Oligocene; Rott, Rheinland, Germany.
Cantharoctonus bruesii
STATZ, 1936b:275, pl. 7, fig. 22
Holotype 3930 (MISSING); Oligocene; Rott, Rheinland, Germany.

Clinocentrus rottensis
STATZ, 1936b:276, pl. 8, fig. 23.
Holotype 3931; Oligocene; Rott, Rheinland, Germany.

Doryctes conjunctus
STATZ, 1938d:86, pl. 9, fig. 13.
Holotype 3932; Oligocene; Rott, Rheinland, Germany.

Doryctes longulus
STATZ, 1938d:86, pl. 9, fig. 12.
Holotype 3933; Oligocene; Rott, Rheinland, Germany.

Doryctes rotundatus
STATZ, 1938d:85, pl. 8, fig. 11.
Holotype 3934; Oligocene; Rott, Rheinland, Germany.

Hecabolus gladiator
STATZ, 1936b: 274, pl. 7, fig. 20.
Holotype 3935; Oligocene; Rott, Rheinland, Germany.

"Meteorus" longicornis
STATZ, 1938d:81, pl. 8, fig. 6.
Holotype 3936; Oligocene; Rott, Rheinland, Germany.

*Palaeoblacus aculeatus
STATZ, 1936b:277, pl. 8, fig. 24.
Holotype 3937; Oligocene; Rott, Rheinland, Germany.

Pentacleura ? filicornis
STATZ, 1938d:87, pl. 9, fig. 15.
Holotype 3938; Oligocene; Rott, Rheinland, Germany.

Pentacleura longipennis
STATZ, 1936b:278, pl. 9, fig. 26.
Holotype 3939; Oligocene; Rott, Rheinland, Germany.

"Rhogas" festivus
STATZ, 1938d:87, pl. 9, fig. 14.
Holotype 3940; Oligocene; Rott, Rheinland, Germany.

Spathius longicornis
STATZ, 1938d:84, pl. 8, fig. 10.
Holotype 3941; Oligocene; Rott, Rheinland, Germany.

Spathius ? macroradialis
STATZ, 1938d:84, pl. 8, fig. 9.
Holotype 3942; Oligocene; Rott, Rheinland, Germany.

Spathius pedicularis
STATZ, 1936b:275, pl. 7, fig. 21.
Holotype 3943; Oligocene; Rott, Rheinland, Germany.

Tanycarpa interstitialis
STATZ, 1936b:279, pl. 9, fig. 28.
Holotype 3944; Oligocene; Rott, Rheinland, Germany.

Family DIAPRIIDAE

Diapriites insignicornis
STATZ, 1938d:104, pl. 14, fig. 41.
Holotype 3945; Oligocene; Rott, Rheinland, Germany.
Diapriites minimus  
STATZ, 1938d: 105, pl. 14, fig. 42.  
Holotype 3946; Oligocene; Rott, Rheinland, Germany.

Pantoclis margaritaceus  
STATZ, 1938d: 103, pl. 13, fig. 39.  
Holotype 3947; Oligocene; Rott, Rheinland, Germany.

Family ENCYRTIDAE

“Encyrus” clavicornis  
STATZ, 1938d: 102, pl. 13, fig. 37.  
Holotype 3948. Oligocene; Rott, Rheinland, Germany.

Family EULOPHIDAE

“Eulophus” elegantulus  
STATZ, 1938d: 100, pl. 13, fig. 35.  
3 syntypes 3949 (pl. 13, fig. 35); 3950-3951 (unfigured); Oligocene; Rott, Rheinland, Germany.

“Eulophus” mundus  
STATZ, 1938d: 101, pl. 13, fig. 36.  
Holotype 3952; Oligocene; Rott, Rheinland, Germany.

Family FIGITIDAE

Figites ? planus  
STATZ, 1938d: 90, pl. 10, fig. 19.  
Holotype 3953; Oligocene; Rott, Rheinland, Germany.

Figites ? rotundatus  
STATZ, 1938d: 89, pl. 10, fig. 18.  
Holotype 3954; Oligocene; Rott, Rheinland, Germany.

Figites ? spiniger  
STATZ, 1938d: 89, pl. 10, fig. 17.  
Holotype 3955; Oligocene; Rott, Rheinland, Germany.

Family HELORIDAE

Helorus festivus  
STATZ, 1938d: 102, pl. 13, fig. 38.  
Holotype 3956; Oligocene; Rott, Rheinland, Germany.

Family ICHNEUMONIDAE

“Compoples” parvulus  
STATZ, 1938d: 79, pl. 7, fig. 3.  
Holotype 3957; Oligocene; Rott, Rheinland, Germany.

Cryptus ? morleyi (Meunier, 1923)  
STATZ, 1938b as pl. 3, fig. 9.  
Figured specimen 3958 (MISSING); Oligocene; Rott, Rheinland, Germany.

Hemiteles hirsuta  
STATZ, 1936b: 270, pl. 5, fig. 13.  
Holotype 3959; Oligocene; Rott, Rheinland, Germany.

Microcryptus terebrator  
STATZ, 1936b: 269, pl. 4, fig. 11.  
Holotype 3960; Oligocene; Rott, Rheinland, Germany.
Orthopehma curvitibialis
STATZ, 1936b:272, pl. 6, fig. 17.
Holotype 3961; Oligocene; Rott, Rheinland, Germany.

Phygadeuon crassicornis
STATZ, 1936b:269.
Holotype 3962; Oligocene; Rott, Rheinland, Germany.
NOTE: The figured (pl. 4, fig. 12) counterplate is in the Kastenholz collection.

Pimla cyclostigmata
STATZ, 1936b:270, pl. 5, fig. 14.
Holotype 3963; Oligocene; Rott, Rheinland, Germany.

Polysphincta statzi (Meunier, 1923)
STATZ, 1936b as pl. 5, fig. 15.
Figured specimen 3964; Oligocene; Rott, Rheinland, Germany.

Protarchus antiquus
STATZ, 1936b:273, pl. 6, fig. 18.
Holotype 3965; Oligocene; Rott, Rheinland, Germany.

Stenomacrus obliquus
STATZ, 1936b:273, pl. 6, fig. 19.
Holotype 3966; Oligocene; Rott, Rheinland, Germany.

Family MEGACHILIDAE

Anthidium mortuum (Meunier, 1920a)
STATZ, 1936b as pl. 13, fig. 38.
Figured specimen 3967 (MISSING); Oligocene; Rott, Rheinland, Germany.

Family PLATYGASTERIDAE

Platygasterites femoralis
STATZ, 1938d:106, pl. 14, fig. 43.
Holotype 3968; Oligocene; Rott, Rheinland, Germany.

Platygasterites spinosa
STATZ, 1938d:106, pl. 14, fig. 44.
Holotype 3969; Oligocene; Rott, Rheinland, Germany.

Family PROCTOTRUYPIDAE

Psilomma pulchellus
STATZ, 1938d:104, pl. 13, fig. 40.
2 syntypes 3970 (pl. 13, fig. 40); 3971 (unfigured); Oligocene; Rott, Rheinland, Germany.
NOTE: There is an additional unfigured syntype in the Kastenholz collection.

Family PSAMMOCHARIDAE

Priocnemis aertsi
STATZ, 1936b:283, pl. 12, fig. 35.
Holotype 3972; Oligocene; Rott, Rheinland, Germany.

Priocnemis wetteri
STATZ, 1938d:108, pl. 14, fig. 47.
Holotype 3973; Oligocene; Rott, Rheinland, Germany.

Psammocharides depressa
STATZ, 1936b:283, pl. 12, fig. 34.
Holotype 3974; Oligocene; Rott, Rheinland, Germany.
Family PTEROMALIDAE

"Pteromalus" abdominalis
STATZ, 1938d:95, pl. 11, fig. 25.
Holotype 3975; Oligocene; Rott, Rheinland, Germany.

"Pteromalus" aerosus
STATZ, 1938d:98, pl. 12, fig. 30.
Holotype 3976; Oligocene; Rott, Rheinland, Germany.

"Pteromalus" atomus
STATZ, 1938d:100, pl. 12, fig. 33.
Holotype 3977; Oligocene; Rott, Rheinland, Germany.

"Pteromalus" atra
STATZ, 1938d:97, pl. 12, fig. 28.
Holotype 3978; Oligocene; Rott, Rheinland, Germany.

"Pteromalus" clavicornis
STATZ, 1938d:94, pl. 11, fig. 24.
Holotype 3979; Oligocene; Rott, Rheinland, Germany.

"Pteromalus" crassicapitatus
STATZ, 1938d:94, pl. 11, fig. 23.
Holotype 3980; Oligocene; Rott, Rheinland, Germany.

"Pteromalus" defossus
STATZ, 1938d:92, pl. 10, fig. 21.
Holotype 3981; Oligocene; Rott, Rheinland, Germany.

"Pteromalus" hirtipes
STATZ, 1938d:96, pl. 11, fig. 27.
Holotype 3982; Oligocene; Rott, Rheinland, Germany.

"Pteromalus" latipennis
STATZ, 1938d:93, pl. 11, fig. 22.
Holotype 3983; Oligocene; Rott, Rheinland, Germany.

"Pteromalus" longicornis
STATZ, 1938d:99, pl. 12, fig. 32.
Holotype 3984; Oligocene; Rott, Rheinland, Germany.

"Pteromalus" pulchellus
STATZ, 1938d:91, pl. 10, fig. 20.
3 syntypes 3985, (pl. 10, fig. 20); 3986-3987 (unfigured); Oligocene; Rott,
Rheinland, Germany.

"Pteromalus" pygmaeus
STATZ, 1938d:100, pl. 12, fig. 34.
Holotype 3988; Oligocene; Rott, Rheinland, Germany.

"Pteromalus" rectispinus
STATZ, 1938d:99, pl. 12, fig. 31.
Holotype 3989; Oligocene; Rott, Rheinland, Germany.

"Pteromalus" rutilis
STATZ, 1938d:96, pl. 11, fig. 26.
7 syntypes 3990 (pl. 11, fig. 26); 3991-3996 (unfigured); Oligocene; Rott.
Rheinland, Germany.

"Pteromalus" venustus
STATZ, 1938d:98, pl. 12, fig. 29.
Holotype 3997; Oligocene; Rott, Rheinland, Germany.

Family SCELIONIDAE

Scelionites capitatus
STATZ, 1938d:107, pl. 14, fig. 45.
Holotype 3998; Oligocene; Rott, Rheinland, Germany.
Family SPHECIDAЕ

*Nysson rottensis*
  MEUNIER, 1915:212, pl. 22, fig. 1.
  Holotype 4327; Oligocene; Rott, Rheinland, Germany.

*Sphex obscura*
  STATZ, 1936b:284, pl. 12, fig. 36.
  Holotype 3999; Oligocene; Rott, Rheinland, Germany.

Family TENTHREDINIDAE

*Holocampa enslini*
  STATZ, 1936b:266, pl. 3, fig. 7.
  Holotype 4000; Oligocene; Rott, Rheinland, Germany.

*Leucemphria oligocenea* (Meunier, 1923)
  STATZ, 1936b as pl. 3, fig. 8.
  Figured specimen 4001 (MISSING); Oligocene; Rott, Rheinland, Germany.

*Tenthredo gracilis*
  STATZ, 1936b:266, pl. 2, fig. 6.
  Holotype 4023, Oligocene; Rott, Rheinland, Germany.

Family TRIGONALIDAE

*“Trigonalys” bischoffi*
  STATZ, 1938d:77, pl. 6, pl. 7, fig. 1.
  Holotype 4002; Oligocene; Rott, Rheinland, Germany.

Family VESPIDAE

*Polistes signata*
  STATZ, 1936b:282, pl. 11, fig. 33.
  Holotype 4003; Oligocene; Rott, Rheinland, Germany.

*Vespa bilineata*
  STATZ, 1936b:281, pl. 10, fig. 31.
  4 syntypes 4004 (pl. 10, fig. 31); 4005-4007 (unfigured); Oligocene; Rott, Rheinland, Germany.

*Vespa cordifera*
  STATZ, 1936b:280, pl. 10, fig. 30.
  Holotype 4008; Oligocene; Rott, Rheinland, Germany.

*Vespa nigra*
  STATZ, 1936b:282, pl. 11, fig. 32.
  Holotype 4009; Oligocene; Rott, Rheinland, Germany.

Family XYELIDAE

*Pleroneura graciosa* (Meunier, 1920a)
  STATZ, 1936b as pl. 1, fig. 1.
  Figured specimen 4010; Oligocene; Rott, Rheinland, Germany.

*Xyela angustipennis*
  STATZ, 1936b:264, pl. 1, fig. 3.
  Holotype 4011 (pl. 1, fig. 3); 3 paratypes 4012-4014 (unfigured); Oligocene; Rott, Rheinland, Germany.

*Xyela latipennis*
  STATZ, 1936b:263, pl. 1, fig. 2.
  Holotype 4015 (pl. 1, fig. 2); 4 paratypes 4016-4019 (unfigured); Oligocene; Rott, Rheinland, Germany.
Xyela magna
STATZ, 1936b:264, pl. 2, fig. 4.
Holotype 4020; Oligocene; Rott, Rheinland, Germany.

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