

ALTERNATIVE FAMILY NAMES

(Apteropanorpidae not NA)

Bittacidae

Boreidae

(Choristidae not NA)

Meropeidae

(Nannochoristidae not NA)

(Notiothaumidae not NA)

Panorpidae

Panorpodidae

STATISTICS

The following statistics are offered without comment.

Family	# Names	# Valid
Bittacidae	13	10
Boreidae	17	13
Meropeidae	1	1
Panorpidae	68	54
Panorpodidae	5	5
Total	104	83

CLASSIFICATION

The primary source for the Mecoptera is: Penny, N.D., and G.W. Beyers. 1979. A check-list of the Mecoptera of the World. *Acta Amazonica*, 9(2):365-388. An updated version of this publication may be found on the World Wide Web Site for the California Academy of Sciences. No URL is listed because these addresses tend to change. The families, genera, and species in this publication are given alphabetically without subfamily subdivisions. We are following this arrangement.

BITTACIDAE

Apterobittacus MacLachlan 1893

Apterobittacus apterus MacLachlan 1871 (Bittacus)

Bittacus Latreille 1805

Leptobittacus Hine 1898 Syn.

Thyridates Navas 1908 Syn.

Diplostigma Navas 1908 Syn.

Haplodictyus Navas 1908 Syn.

Klugius Navas 1926 Syn.

Bittacus chlorostigma MacLachlan 1881 (Bittacus)

Bittacus occidentis Walker 1853 (Bittacus)

Bittacus arizonicus Banks 1911 Syn.

Bittacus pilicornis Westwood 1846 (Bittacus)

Bittacus punctiger Westwood 1846 (Bittacus)

Bittacus stigmaterus Say 1823 (Bittacus)

Bittacus pallidipennis Westwood 1846 Syn.

Bittacus strigosus Hagen 1861 (Bittacus)

Bittacus texanus Banks 1908 (Bittacus)

Hylobittacus Byers 1979

Hylobittacus apicalis Hagen 1861 (Bittacus)

Haplodictyus incertus Hagen 1861 Syn.

Orobittacus Villegas and Byers 1981

Orobittacus obscurus Villegas and Byers 1981 (Orobittacus)

BOREIDAE

Boreus Latreille 1816

Ateleptera Dalman 1823 Syn.

Euboreus Lestage 1940 Syn.

Boreus borealis Banks 1923 (Boreus)

Boreus brumalis Fitch 1847 (Boreus)

Boreus californicus Packard 1870 (Boreus)

Boreus unicolor Hine 1901 Syn.

Boreus isolatus Carpenter 1935 Syn.

Boreus fuscus Carpenter 1935 Syn.

Boreus coloradensis Byers 1955 (Boreus)

Boreus elegans Carpenter 1935 (Boreus)

Boreus intermedius Lloyd 1934 (Boreus)

Boreus nivoriundus Fitch 1847 (Boreus)

Boreus nix Carpenter 1935 (Boreus)

Boreus gracilis Carpenter 1935 Syn.

Boreus pilosus Carpenter 1935 (Boreus)

Boreus reductus Carpenter 1933 (Boreus)

Caurinus Russell 1979

Caurinus dectes Russell 1979 (Caurinus)

Hesperoboreus Penny 1977

Hesperoboreus brevicaudus Byers 1961 (Boreus)

Hesperoboreus notoperates Cooper 1972 (Boreus)

MEROPEIDAE

Merope Newman 1838

Merope tuber Newman 1838 (Merope)

PANORPIDAE

Panorpa Linnaeus 1758

Panorpha Radermacher 1779 Missp.
Aulops Enderlein 1910 Syn.
Estenalla Navas 1912 Syn.

Panorpa actua Carpenter 1931 (Panorpa)
 Panorpa acuminata Byers 1993 (Panorpa)
 Panorpa americana Swederus 1787 (Panorpa)
Panorpa fasciata Fabricius 1793 Syn.
 Panorpa anomala Carpenter 1931 (Panorpa)
Panorpa proximata Carpenter 1931 Syn.
 Panorpa banksi Hine 1901 (Panorpa)
Panorpa affinis Banks 1895 Homo.
Panorpa chelata Carpenter 1931 Syn.
 Panorpa banksiana Penny and Byers 1979 (Panorpa)
Panorpa interrupta Banks 1918 Homo.
 Panorpa bichai Byers 1993 (Panorpa)
 Panorpa bifida Carpenter 1935 (Panorpa)
 Panorpa braueri Carpenter 1931 (Panorpa)
 Panorpa carolinensis Banks 1905 (Panorpa)
 Panorpa choctaw Byers 1993 (Panorpa)
 Panorpa claripennis Hine 1901 (Panorpa)
 Panorpa confinis Byers 1993 (Panorpa)
 Panorpa consuetudinis Snodgrass 1927 (Panorpa)
Panorpa elaborata Carpenter 1931 Syn.
 Panorpa debilis Westwood 1846 (Panorpa)
Panorpa canadensis Banks 1895 Syn.
 Panorpa dissimilis Carpenter 1931 (Panorpa)
 Panorpa dubitans Carpenter 1931 (Panorpa)
 Panorpa ensigera Bicha 1983 (Panorpa)
 Panorpa ferruginea Byers 1993 (Panorpa)
 Panorpa flexa Carpenter 1935 (Panorpa)
 Panorpa floridana Byers 1993 (Panorpa)
 Panorpa galerita Byers 1962 (Panorpa)
 Panorpa gracilis Carpenter 1931 (Panorpa)
 Panorpa helena Byers 1962 (Panorpa)
 Panorpa hispida Byers 1993 (Panorpa)
 Panorpa hungfordi Byers 1973 (Panorpa)
 Panorpa insolens Carpenter 1935 (Panorpa)
 Panorpa isolata Carpenter 1931 (Panorpa)
Panorpa decorata Carpenter 1931 Syn.
 Panorpa latipennis Hine 1901 (Panorpa)
Panorpa longipennis Banks 1911 Syn.
 Panorpa longicornis Carpenter 1931 (Panorpa)
 Panorpa lugubris Swederus 1787 (Panorpa)
Panorpa scorio Fabricius 1793 Syn.
 Panorpa maculosa Hagen 1861 (Panorpa)
 Panorpa mirabilis Carpenter 1931 (Panorpa)
 Panorpa nebulosa Westwood 1846 (Panorpa)
 Panorpa neglecta Carpenter 1931 (Panorpa)
 Panorpa nuptialis Gerstaecker 1863 (Panorpa)
 Panorpa oconee Byers 1993 (Panorpa)
 Panorpa pachymera Byers 1993 (Panorpa)
 Panorpa palustris Byers 1958 (Panorpa)
 Panorpa planicola Byers 1993 (Panorpa)
 Panorpa robusta Carpenter 1931 (Panorpa)
 Panorpa rufa Gray 1832 (Panorpa)
 Panorpa rufescens Rambur 1842 (Panorpa)
Panorpa confusa Westwood 1846 Syn.
 Panorpa rupeculana Byers 1993 (Panorpa)
 Panorpa scopulifera Byers 1993 (Panorpa)
 Panorpa setifera Webb 1974 (Panorpa)
 Panorpa sigmoides Carpenter 1931 (Panorpa)
 Panorpa speciosa Carpenter 1931 (Panorpa)
 Panorpa subfurcata Westwood 1842 (Panorpa)
Panorpa signifer Banks 1900 Syn.
Panorpa modesta Carpenter 1931 Syn.

Panorpa submaculosa Carpenter 1931 (Panorpa)
Panorpa utahensis Gurney 1937 Syn.
 Panorpa subulifera Byers 1962 (Panorpa)
 Panorpa venosa Westwood 1846 (Panorpa)
 Panorpa vernalis Byers 1973 (Panorpa)
 Panorpa virginica Banks 1906 (Panorpa)

PANORPODIDAE**Brachypanorpa Carpenter 1931**

Brachypanorpa carolinensis Banks 1905 (Panorpodes)
 Brachypanorpa jeffersoni Byers 1976 (Brachypanorpa)
 Brachypanorpa montana Carpenter 1931 (Brachypanorpa)
 Brachypanorpa oregonensis MacLachlan 1881 (Panorpodes)
 Brachypanorpa sacajawea Byers 1990 (Brachypanorpa)

GENERIC INDEX

Apterobittacus MacLachlan (Bittacidae)
 Ateleptera Dalman (Boreidae) Boreus
 Aulops Enderlein (Panorpidae) Panorpa
 Bittacus Latreille (Bittacidae)
 Boreus Latreille (Boreidae)
 Brachypanorpa Carpenter (Panorpodidae)
 Caurinus Russell (Boreidae)
 Diplostigma Navas (Bittacidae) Bittacus
 Estenalla Navas (Panorpidae) Panorpa
 Euboreus Lestage (Boreidae) Boreus
 Haplodictyus Navas (Bittacidae) Bittacus
 Hesperoboreus Penny (Boreidae)
 Hylobittacus Byers (Bittacidae)
 Klugius Navas (Bittacidae) Bittacus
 Leptobittacus Hine (Bittacidae) Bittacus
 Merope Newman (Meropeidae)
 Orbittacus Villegas and Byers (Bittacidae)
 Panorpa Linnaeus (Panorpidae)
 Panorpha Radermacher (Panorpidae) Panorpa
 Thyridates Navas (Bittacidae) Bittacus

SPECIES INDEX

actua Carpenter Panorpa (Panorpidae) Panorpa
 acuminata Byers Panorpa (Panorpidae) Panorpa
 affinis Banks Panorpa (Panorpidae) Panorpa banksi
 americana Swederus Panorpa (Panorpidae) Panorpa
 anomala Carpenter Panorpa (Panorpidae) Panorpa
 apicalis Hagen Bittacus (Bittacidae) Hylobittacus
 apterus MacLachlan Bittacus (Bittacidae) Apterobittacus
 arizonicus Banks Bittacus (Bittacidae) Bittacus occidentis
 banksi Hine Panorpa (Panorpidae) Panorpa
 banksiana Penny and Byers Panorpa (Panorpidae) Panorpa
 bichai Byers Panorpa (Panorpidae) Panorpa
 bifida Carpenter Panorpa (Panorpidae) Panorpa
 borealis Banks Boreus (Boreidae) Boreus
 braueri Carpenter Panorpa (Panorpidae) Panorpa

- brevicaudus Byers Boreus (Boreidae) Hesperoboreus
 brumalis Fitch Boreus (Boreidae) Boreus
 californicus Packard Boreus (Boreidae) Boreus
 canadensis Banks *Panorpa* (Panorpidae) *Panorpa debilis*
 carolinensis Banks *Panorpa* (Panorpidae) *Panorpa*
 carolinensis Banks Panorpodes (Panorpididae) Brachypanorpa
 chelata Carpenter *Panorpa* (Panorpidae) *Panorpa banksi*
 chlorostigma MacLachlan Bittacus (Bittacidae) Bittacus
 choctaw Byers *Panorpa* (Panorpidae) *Panorpa*
 claripennis Hine *Panorpa* (Panorpidae) *Panorpa*
 coloradensis Byers Boreus (Boreidae) Boreus
 confinis Byers *Panorpa* (Panorpidae) *Panorpa*
 confusa Westwood *Panorpa* (Panorpidae) *Panorpa rufescens*
 consuetudinis Snodgrass *Panorpa* (Panorpidae) *Panorpa*
 debilis Westwood *Panorpa* (Panorpidae) *Panorpa*
 decorata Carpenter *Panorpa* (Panorpidae) *Panorpa isolata*
 dectes Russell Caurinus (Boreidae) Caurinus
 dissimilis Carpenter *Panorpa* (Panorpidae) *Panorpa*
 dubitans Carpenter *Panorpa* (Panorpidae) *Panorpa*
 elaborata Carpenter *Panorpa* (Panorpidae) *Panorpa consuetudinis*
 elegans Carpenter Boreus (Boreidae) Boreus
 ensigera Bicha *Panorpa* (Panorpidae) *Panorpa*
 fasciata Fabricius *Panorpa* (Panorpidae) *Panorpa americana*
 ferruginea Byers *Panorpa* (Panorpidae) *Panorpa*
 flexa Carpenter *Panorpa* (Panorpidae) *Panorpa*
 floridana Byers *Panorpa* (Panorpidae) *Panorpa*
 fuscus Carpenter Boreus (Boreidae) Boreus californicus
 galerita Byers *Panorpa* (Panorpidae) *Panorpa*
 gracilis Carpenter *Panorpa* (Panorpidae) *Panorpa*
 gracilis Carpenter Boreus (Boreidae) Boreus nix
 helena Byers *Panorpa* (Panorpidae) *Panorpa*
 hispida Byers *Panorpa* (Panorpidae) *Panorpa*
 hungfordi Byers *Panorpa* (Panorpidae) *Panorpa*
 incertus Hagen *Haplodictyus* (Bittacidae) *Hylobittacus apicalis*
 insolens Carpenter *Panorpa* (Panorpidae) *Panorpa*
 intermedius Lloyd Boreus (Boreidae) Boreus
 interrupta Banks *Panorpa* (Panorpidae) *Panorpa banksiana*
 isolata Carpenter *Panorpa* (Panorpidae) *Panorpa*
 isolatus Carpenter Boreus (Boreidae) Boreus californicus
 jeffersoni Byers Brachypanorpa (Panorpididae) Brachypanorpa
 latipennis Hine *Panorpa* (Panorpidae) *Panorpa*
 longicornis Carpenter *Panorpa* (Panorpidae) *Panorpa*
 longipennis Banks *Panorpa* (Panorpidae) *Panorpa latipennis*
 lugubris Swederus *Panorpa* (Panorpidae) *Panorpa*
 maculosa Hagen *Panorpa* (Panorpidae) *Panorpa*
 mirabilis Carpenter *Panorpa* (Panorpidae) *Panorpa*
 modesta Carpenter *Panorpa* (Panorpidae) *Panorpa subfurcata*
 montana Carpenter Brachypanorpa (Panorpididae) Brachypanorpa
 nebulosa Westwood *Panorpa* (Panorpidae) *Panorpa*
 neglecta Carpenter *Panorpa* (Panorpidae) *Panorpa*
 nivoriundus Fitch Boreus (Boreidae) Boreus
 nix Carpenter Boreus (Boreidae) Boreus
 notoperates Cooper Boreus (Boreidae) Hesperoboreus
 nuptialis Gerstaecker *Panorpa* (Panorpidae) *Panorpa*
 obscurus Villegas and Byers Orobittacus (Bittacidae) Orobittacus
 occidentis Walker Bittacus (Bittacidae) Bittacus
 oconee Byers *Panorpa* (Panorpidae) *Panorpa*
 oregonensis MacLachlan Panorpodes (Panorpididae) Brachypanorpa
 pachymera Byers *Panorpa* (Panorpidae) *Panorpa*
 pallidipennis Westwood Bittacus (Bittacidae) Bittacus stigmaterus
 palustris Byers *Panorpa* (Panorpidae) *Panorpa*
 pilicornis Westwood Bittacus (Bittacidae) Bittacus
 pilosus Carpenter Boreus (Boreidae) Boreus
 planicola Byers *Panorpa* (Panorpidae) *Panorpa*
 proximata Carpenter *Panorpa* (Panorpidae) *Panorpa anomala*
 punctiger Westwood Bittacus (Bittacidae) Bittacus
 reductus Carpenter Boreus (Boreidae) Boreus
 robusta Carpenter *Panorpa* (Panorpidae) *Panorpa*
 rufa Gray *Panorpa* (Panorpidae) *Panorpa*
 rufescens Rambur *Panorpa* (Panorpidae) *Panorpa*
 rupeculana Byers *Panorpa* (Panorpidae) *Panorpa*
 sacajawea Byers Brachypanorpa (Panorpididae) Brachypanorpa
 scopulifera Byers *Panorpa* (Panorpidae) *Panorpa*
 scorpio Fabricius *Panorpa* (Panorpidae) *Panorpa lugubris*
 setifera Webb *Panorpa* (Panorpidae) *Panorpa*
 sigmoides Carpenter *Panorpa* (Panorpidae) *Panorpa*
 signifer Banks *Panorpa* (Panorpidae) *Panorpa subfurcata*
 speciosa Carpenter *Panorpa* (Panorpidae) *Panorpa*
 stigmaterus Say Bittacus (Bittacidae) Bittacus
 strigosus Hagen Bittacus (Bittacidae) Bittacus
 subfurcata Westwood *Panorpa* (Panorpidae) *Panorpa*
 submaculosa Carpenter *Panorpa* (Panorpidae) *Panorpa*
 subulifera Byers *Panorpa* (Panorpidae) *Panorpa*
 texanus Banks Bittacus (Bittacidae) Bittacus
 tuber Newman Merope (Meropeidae) Merope
 unicolor Hine Boreus (Boreidae) Boreus californicus
 utahensis Gurney *Panorpa* (Panorpidae) *Panorpa submaculosa*
 venosa Westwood *Panorpa* (Panorpidae) *Panorpa*
 vernalis Byers *Panorpa* (Panorpidae) *Panorpa*
 virginica Banks *Panorpa* (Panorpidae) *Panorpa*

