

Identification and Ecology of

Australian Freshwater Invertebrates

An interactive guide with colour digital imagery to assist in the identification of aquatic invertebrates.



If you have information to add, please contact bugsonline@mdfrc.org.au
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	Old				New		
	Family	Genus	Species	Date of change	Family	Genus	Species
Acarina / Acari							
	Astigmata: Histiostomatidae	<i>Histiostoma</i>		1998-2013	Oribatida: Histiostomatidae	<i>Histiostoma</i>	
Bivalvia							
Veneroida	Sphaeriidae	<i>Sphaerium</i>		2000	Sphaeriidae	<i>Musculium</i>	
Collembola							
Symphyleona	Sminthuridae (part)	<i>Sminthurides</i>	<i>aquaticus, stagnalis</i>	1980	Sminthuridae	<i>Sminthurides</i>	<i>aquaticus, stagnalis</i>
Symphyleona	Sminthuridae	<i>Sminthurides</i>	<i>stagnalis</i>	1994	Sminthuridae	<i>Pygicormides</i>	<i>stagnalis</i>
Crustacea							
Amphipoda	Ceinidae (part)			2003	Hyalidae		
Amphipoda	Hyalidae			pre 2009	Chiltoniidae		
Conchostraca	Limnadiidae	<i>Limnadia</i> (part)		2012	Limnadiidae	<i>Paralimnadia</i>	
Decapoda	Kakaducarididae	<i>Kakaducaris</i>	<i>glabrus</i>	2013	Palaemonidae	<i>Leptopalaemon</i>	<i>glabrus</i>
Decapoda	Kakaducarididae			2013	Palaemonidae (part)		
Decapoda	Palaemonidae	<i>Palaemonetes</i>	<i>holthuisi</i>	1993	Palaemonidae	<i>Calathaemon</i>	<i>holthuisi</i>
Decapoda	Palaemonidae (part)			1993	Kakaducarididae		
Decapoda	Parastacidae	<i>Cherax</i>	<i>tenuimanus</i> (part)	2002	Parastacidae	<i>Cherax</i>	<i>cainii</i>
Decapoda	Parastacidae	<i>Parastacoides</i> (part)		2006	Parastacidae	<i>Ombrostacoides, Spinastacoides</i>	
Decapoda	Sundathelphusidae	<i>Holthuisana</i>		2002	Parathelphusidae	<i>Austrothelphusa</i>	
Isopoda	Amphisopidae	<i>Amphisopus</i>	<i>ambiguus</i>	1943	Amphisopidae	<i>Synamphisopus</i>	<i>ambiguus</i>
Isopoda	Amphisopidae	<i>Paramphisopus</i>	<i>palustris fairbridgei</i>	1944	Amphisopidae	<i>Paramphisopus</i>	<i>fairbridgei</i>
Isopoda	Amphisopidae	<i>Phreatoicus</i>	<i>lintoni</i>	1926	Amphisopidae	<i>Amphisopus</i>	<i>lintoni</i>
Isopoda	Cirolanidae (part)	<i>Austroargathona</i>	<i>picta</i>	2002	Corallanidae	<i>Tachaea</i>	<i>caridophaga</i>
Isopoda	Enigmata (cf Phreatoicoidea)	<i>Tainisopus</i>		2012	Tainisopidae	<i>Tainisopus</i>	
Isopoda	Mesamphisopidae	<i>Eophreatoicus</i>	<i>kershawi</i>	2005	Amphisopidae	<i>Eophreatoicus</i>	<i>kershawi</i>
Isopoda	Mesamphisopidae	<i>Eremisopus</i>	<i>beeii</i>	2005	Amphisopidae	<i>Eremisopus</i>	<i>beeii</i>
Isopoda	Oniscidae (part)	<i>Haloniscus</i>		2001	Scyphacidae	<i>Haloniscus</i>	
Isopoda	Phreatoicidae	<i>Colubotelson</i>	<i>chiltoni minor</i>		Phreatoicidae	<i>Colubotelson</i>	<i>minor</i>
Isopoda	Phreatoicidae	<i>Colubotelson</i>	<i>chiltoni saycei</i>		Phreatoicidae	<i>Colubotelson</i>	<i>saycei</i>
Isopoda	Phreatoicidae	<i>Colubotelson</i>	<i>joyneri searlei</i>		Phreatoicidae	<i>Colubotelson</i>	<i>searlei</i>
Isopoda	Phreatoicidae	<i>Colubotelson</i>	<i>tattersalli dubius</i>		Phreatoicidae	<i>Colubotelson</i>	<i>dubius</i>
Isopoda	Phreatoicidae	<i>Metaphreatoicus</i>	<i>australis lacustris</i>		Phreatoicidae	<i>Metaphreatoicus</i>	<i>lacustris</i>
Isopoda	Phreatoicidae	<i>Phreatoicus</i>	<i>australis</i>		Phreatoicidae	<i>Metaphreatoicus</i>	<i>australis</i>
Isopoda	Phreatoicidae	<i>Phreatoicus</i>	<i>brevicaudatus</i>		Phreatoicidae	<i>Onchotelson</i>	<i>brevicaudatus</i>
Isopoda	unplaced (cf Hypsimetopodidae)	<i>Peludo</i>	<i>paraliotus</i>	2012	Amphisopidae	<i>Peludo</i>	<i>paraliotus</i>
Gastropoda							
Basommatophora	Glacidorbidae	<i>Glacidorbis</i>	<i>pawpela</i>	2000	Glacidorbidae	<i>Benthodorbis</i>	<i>pawpela</i>
Basommatophora	Glacidorbidae	<i>Glacidorbis</i>	<i>pedderi</i>	2000	Glacidorbidae	<i>Striadorbis</i>	<i>pedderi</i>
Cerithimorpha	previously in Order Neotaenioglossa			2008	Thiaridae		
Cerithimorpha	Thiaridae	<i>Brotia</i>	<i>supralirata</i>	2009	Pachychilidae	<i>Pseudopotamis</i>	<i>supralirata</i>
Cerithimorpha	Thiaridae	<i>Stenomelania</i>	<i>onca</i>	2009	Thiaridae	<i>Melasma</i>	<i>onca</i>
Cerithimorpha	Thiaridae	<i>Thiara</i>	<i>balonnensis</i>	2009	Thiaridae	<i>Plotiopsis</i>	<i>balonnensis</i>
Cyclononeritomorpha	previously Order Neritomorpha			2008	Neritidae		
Hydrophila	Ancylidae	<i>Ferrissia</i>		2013	Planorbidae (part)	<i>Ferrissia</i>	

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Hygrophila	Lymnaeidae	<i>Austropeplea</i>	<i>lessoni</i>	2009	Lymnaeidae	<i>Bullastra</i>	<i>lessoni</i> EAus, <i>vinosa</i> NAus
Hygrophila	Lymnaeidae	<i>Lymnaea</i>	<i>peregra</i>		Lymnaeidae	<i>Radix</i>	<i>peregra</i>
Hygrophila	Planorbidae	<i>Pygmanisus</i>			Planorbidae	<i>Gyraulus</i> (part)	
Hygrophila	previously in Order Basommatophora			2008	Ancyliidae		
Hygrophila	previously in Order Basommatophora			2008	Lymnaeidae		
Hygrophila	previously in Order Basommatophora			2008	Physidae		
Hygrophila	previously in Order Basommatophora			2008	Planorbidae		
Hypsogastropoda	Assimineidae	<i>Assiminea</i>	<i>buccinoides</i>	2005	Assimineidae	<i>Cryptassiminea</i>	7 species
Hypsogastropoda	Hydrobiidae			2013	Tateidae		
Hypsogastropoda	previously in Order Neotaenioglossa			2008	Assimineidae		
Hypsogastropoda	previously in Order Neotaenioglossa			2008	Bithyniidae		
Hypsogastropoda	previously in Order Neotaenioglossa			2008	Hydrobiidae		
Hypsogastropoda	previously in Order Neotaenioglossa			2008	Pomatiopsidae		
Neritopsina	previously Order Cycloneritomorpha			2013	Neritidae		
Hirudinea							
Arhynchobdellida	Richardsonianidae			2001	Hirudinidae		
Insecta							
Coleoptera	Brentidae	<i>Nanophyes</i>		1994	Nanophyidae	<i>Austronanodes</i>	
Coleoptera	Carabidae	<i>Casnoidea</i>	4 species	2005	Carabidae	<i>Ophionea</i>	4 species
Coleoptera	Carabidae: Bembidiinae	<i>Tasmanitachoides</i>		2008	Carabidae: Trechinae	<i>Tasmanitachoides</i>	
Coleoptera	Dytiscidae	<i>Allomatus</i>		2013	Dytiscidae	<i>Batrachomatus</i>	
Coleoptera	Dytiscidae	<i>Bidessodes</i>	7 species	2009	Dytiscidae	<i>Neobidessodes</i>	7 species
Coleoptera	Dytiscidae	<i>Boongurrus</i>	2 species	2004	Dytiscidae	<i>Limbodessus</i> (now includes)	2 species
Coleoptera	Dytiscidae	<i>Liodessus</i>	6 species	2004	Dytiscidae	<i>Limbodessus</i> (now includes)	6 species
Coleoptera	Dytiscidae	<i>Nirridessus</i>	11 species	2003	Dytiscidae	<i>Limbodessus</i> = <i>Tjirtudessus</i>	
Coleoptera	Dytiscidae	<i>Nirripiri</i>		2001-2013	Dytiscidae	<i>Paroster</i>	
Coleoptera	Dytiscidae	<i>Tjirtudessus</i>	13 species	2004	Dytiscidae	<i>Limbodessus</i> (now includes)	13 species
Coleoptera	Helminthidae				Elmidae		
Coleoptera	Hydrophilidae	<i>Paracaena</i>	7 species	2007	Hydrophilidae	<i>Anacaena</i>	8 species
Coleoptera	Hydrophilidae (part)	<i>Hydrochus</i>			Hydrochidae	<i>Hydrochus</i>	
Coleoptera	Hydrophilidae (part)	<i>Spercheus</i>			Spercheidae	<i>Spercheus</i>	
Coleoptera	Hydrophilidae (part)				Georissidae	<i>Georissus</i>	
Coleoptera	Microsporidae=Sphaeriidae (1985)	<i>Microsporus</i>	2 species	2000	Sphaeriidae	<i>Sphaerius</i>	
Coleoptera	Noteridae	<i>Hydrocanthus</i>	<i>waterhousei</i>	2006	Noteridae	<i>Hydrocanthus</i>	<i>micans</i> group
Diptera	Ceratopogonidae	<i>Ceratopogon</i>		1991	previous misidentification - does not occur in Australia		
Diptera	Chaoboridae (part)	<i>Corethrella</i>	3 species	1994	Corethrellidae	<i>Corethrella</i>	3 species
Diptera	Culicidae						
			In the literature of 2004 to 2009, there were multiple changes of the taxonomic status of species and genera names. To determine the change for a particular genus or species go to http://www.environment.gov.au/biodiversity/abrs/online-resources/fauna/afd/taxa/CULICINAE/names				
Diptera	Dixidae	<i>Dixa</i>	2 species	1999	Dixidae	<i>Nothodixa</i>	2 species
Diptera	Dixidae	<i>Dixa</i>	4 species	1999	Dixidae	<i>Dixella</i>	4 species
Diptera	Psychodidae	<i>Pericoma</i>	15 species	1995-1999	Psychodidae	<i>Rotundopteryx</i>	15 species
Diptera	Rhagionidae (part)	<i>Dasyomma</i>		1973	Athericidae	<i>Dasyomma</i>	
Diptera	Rhagionidae (part)	<i>Suraginella</i>		1973	Athericidae	<i>Suraginella</i>	
Diptera	Simuliidae	<i>Cnephia</i>	9 species	1999	Simuliidae	<i>Paracnephia</i>	
Ephemeroptera	Baetidae	<i>Baetis</i>	<i>baddamsae</i>	1999	Baetidae	<i>Edmundsiops</i>	<i>instigatus</i>
Ephemeroptera	Baetidae	<i>Baetis</i>	<i>confluens</i>	2010	Baetidae	<i>Offadens</i>	<i>confluens</i>
Ephemeroptera	Baetidae	<i>Edmundsiops</i>	<i>instigatus</i>	2010	Baetidae	<i>Edmundsiops</i>	<i>baddamasae</i>
Ephemeroptera	Caenidae	voucher code		1999	Caenidae	<i>Irpacaenis</i>	
Ephemeroptera	Ephemerellidae	<i>Ephemerellina</i>	<i>picta</i>	1997	Teloganodidae	<i>Austremarella</i>	<i>picta</i>
Ephemeroptera	Leptophlebiidae	<i>Koormonga</i>		-2011	Leptophlebiidae	<i>Thraulophleia</i>	
Ephemeroptera	Leptophlebiidae	<i>Tillyardophlebia</i> (part)		2009	Leptophlebiidae	<i>Riekphlebia</i>	
Ephemeroptera	Siphonuridae			mid 1990s	Nesameletidae		
Hemiptera	Corixidae	<i>Cymatia</i>			Corixidae	<i>Cnethocymatia</i>	
Hemiptera	Corixidae	<i>Micronecta</i>	<i>australiensis</i>	2013	Corixidae	<i>Austronecta</i>	<i>australiensis</i>

	Old				New		
	Family	Genus	Species	Date of change	Family	Genus	Species
Hemiptera	Corixidae	<i>Micronecta</i>	<i>carinata</i>	2013	Corixidae	<i>Austronecta</i>	<i>carinata</i>
Hemiptera	Corixidae	<i>Micronecta</i>	<i>illiesi, concordia, dixonia</i>	2013	Corixidae	<i>Micronecta</i>	<i>annae</i>
Hemiptera	Corixidae	<i>Micronecta</i>	<i>micra</i>	2013	Corixidae	<i>Austronecta</i>	<i>micra</i>
Hemiptera	Corixidae	<i>Micronecta</i>		2006&2008	Micronectidae	<i>Micronecta</i>	
Lepidoptera	Pyrilidae				Crambidae		
Megaloptera	Corydalidae	<i>Austrochauliodes</i>		1983	Corydalidae	<i>Protochauliodes</i>	
Odonata	Aeshnidae	<i>Acanthaeschna</i>	<i>victoria</i>	1999	Telephlebiidae	<i>Acanthaeschna</i>	<i>victoria</i>
Odonata	Aeshnidae	<i>Aeshna (Adveraescl</i>	<i>brevistyla</i>	pre 2009	Aeshnidae	<i>Adveraeschna</i>	<i>brevistyla</i>
Odonata	Aeshnidae	<i>Antipodophlebia</i>	<i>asthenes</i>	1999	Telephlebiidae	<i>Antipodophlebia</i>	<i>asthenes</i>
Odonata	Aeshnidae	<i>Austroaeschna</i>		1999	Telephlebiidae	<i>Austroaeschna</i>	
Odonata	Aeshnidae	<i>Austrophlebia</i>		1999	Telephlebiidae	<i>Austrophlebia</i>	
Odonata	Aeshnidae	<i>Dendroaeschna</i>	<i>conspersa</i>	1999	Telephlebiidae	<i>Dendroaeschna</i>	<i>conspersa</i>
Odonata	Aeshnidae	<i>Hemianax</i>	<i>papuensis</i>	2006-2009	Aeshnidae	<i>Anax</i>	<i>papuensis</i>
Odonata	Aeshnidae	<i>Notoaeschna</i>		1999	Telephlebiidae	<i>Notoaeschna</i>	
Odonata	Aeshnidae	<i>Spinaeschna</i>		1999	Telephlebiidae	<i>Spinaeschna</i>	
Odonata	Aeshnidae	<i>Telephlebia</i>		1999	Telephlebiidae	<i>Telephlebia</i>	
Odonata	Amphipterygidae	<i>Diphlebia</i>		1999	Diphlebiidae	<i>Diphlebia</i>	
Odonata	Archipetaliidae	<i>Archipetalia</i>	<i>auriculata</i>	2006-2009	Austropetaliidae	<i>Archipetalia</i>	<i>auriculata</i>
Odonata	Chlorocyphidae	<i>Rhinocypha</i>	<i>tincta</i>	1999	Libellaginidae	<i>Rhinocypha</i>	<i>tincta</i>
Odonata	Coenagrionidae	<i>Austrocoenagrion</i>	<i>lyelli</i>	pre 2006	Coenagrionidae	<i>Coenagrion</i>	<i>lyelli</i>
Odonata	Corduliidae	<i>Apocordulia</i>	<i>macrops</i>	1999	Austrocorduliidae	<i>Apocordulia</i>	<i>macrops</i>
Odonata	Corduliidae	<i>Archaeophya</i>		1999	Gomphomacromiidae	<i>Archaeophya</i>	
Odonata	Corduliidae	<i>Archaeosynthemis</i>		1999	Synthemistidae	<i>Archaeosynthemis</i>	
Odonata	Corduliidae	<i>Austrocordulia</i>		1999	Austrocorduliidae	<i>Austrocordulia</i>	
Odonata	Corduliidae	<i>Austrophya</i>	<i>mystica</i>	1999	Austrocorduliidae	<i>Austrophya</i>	<i>mystica</i>
Odonata	Corduliidae	<i>Austrosynthemis</i>	<i>cyanitincta</i>	1999	Synthemistidae	<i>Austrosynthemis</i>	<i>cyanitincta</i>
Odonata	Corduliidae	<i>Choristhemis</i>		1999	Synthemistidae	<i>Choristhemis</i>	
Odonata	Corduliidae	<i>Cordulephya</i>		1999	Cordulephyidae	<i>Cordulephya</i>	
Odonata	Corduliidae	<i>Eusynthemis</i>		1999	Synthemistidae	<i>Eusynthemis</i>	
Odonata	Corduliidae	<i>Hemicordulia</i>		1999	Hemicorduliidae	<i>Hemicordulia</i>	
Odonata	Corduliidae	<i>Hesperocordulia</i>	<i>berthoudi</i>	1999	Oxygastridae	<i>Hesperocordulia</i>	<i>berthoudi</i>
Odonata	Corduliidae	<i>Lathrocordulia</i>		1999	Austrocorduliidae	<i>Lathrocordulia</i>	
Odonata	Corduliidae	<i>Macromia</i>		1999	Macromiidae	<i>Macromia</i>	
Odonata	Corduliidae	<i>Micromidia</i>		1999	Austrocorduliidae	<i>Micromidia</i>	
Odonata	Corduliidae	<i>Parasynthemis</i>	<i>regina</i>	1999	Synthemistidae	<i>Parasynthemis</i>	<i>regina</i>
Odonata	Corduliidae	<i>Procordulia</i>		1999	Hemicorduliidae	<i>Procordulia</i>	
Odonata	Corduliidae	<i>Pseudocordulia</i>		1999	Pseudocorduliidae	<i>Pseudocordulia</i>	
Odonata	Corduliidae	<i>Synthemiosis</i>	<i>gomphomacromioides</i>	1999	Synthemistidae	<i>Synthemiosis</i>	<i>gomphomacromioides</i>
Odonata	Corduliidae	<i>Synthemis</i>		1999	Synthemistidae	<i>Synthemis</i>	
Odonata	Corduliidae	<i>Tonyosynthemis</i>		1999	Synthemistidae	<i>Tonyosynthemis</i>	
Odonata	Gomphidae	<i>Ictinogomphus</i>		1999	Lindenidae	<i>Ictinogomphus</i>	
Odonata	Hemicorduliidae	<i>Hemicordulia, Procordulia</i>		2007-2009	Corduliidae	<i>Hemicordulia, Procordulia</i>	
Odonata	Hypolestidae	<i>Lestoidea</i>		pre 2006	Lestoideidae	<i>Lestoidea</i>	
Odonata	Lestoideidae	<i>Lestoidea</i>		1999	Hypolestidae	<i>Lestoidea</i>	
Odonata	Libellaginidae	<i>Rhinocypha</i>	<i>tincta</i>	pre 2006	Chlorocyphidae	<i>Rhinocypha</i>	<i>tincta</i>
Odonata	Libellulidae	<i>Aethriamanta</i>		1999	Urothemistidae	<i>Aethriamanta</i>	
Odonata	Libellulidae	<i>Macrodiplax</i>		1999	Urothemistidae	<i>Macrodiplax</i>	
Odonata	Libellulidae	<i>Trapezostigma</i>		pre 2006	Libellulidae	<i>Tramea</i>	
Odonata	Libellulidae	<i>Urothemis</i>		1999	Urothemistidae	<i>Urothemis</i>	
Odonata	Megapodagrionidae	<i>Argiolestes</i>			Megapodagrionidae	<i>Archiargiolestes</i>	
Odonata	Megapodagrionidae			2013	Argiolestidae		
Odonata	Neopetaliidae	<i>Archipetalia</i>	<i>auriculata</i>	1999	Archipetaliidae	<i>Archipetalia</i>	<i>auriculata</i>
Odonata	Neopetaliidae	<i>Austropetalia</i>		1999	Austropetaliidae	<i>Austropetalia</i>	
Odonata	Oxygastridae	<i>Hesperocordulia</i>	<i>berthoudi</i>	2006-2009	Austrocorduliidae	<i>Hesperocordulia</i>	<i>berthoudi</i>

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Odonata	Protoneuridae	<i>Nososticta</i>	2006-2009	Platycnemidae	<i>Nososticta</i>	
Odonata	suborder Anisoptera		1999	suborder Epiproctophora		
Odonata	suborder Epiproctophora		2009	suborder Epiprocta		
Odonata	Synlestidae	<i>Chorismagrion risi</i>	1999	Chorismagrionidae	<i>Chorismagrion risi</i>	
Odonata	Telephlebitidae	<i>Dendroaeschna conspersa</i>	2006-2009	Brachytronidae	<i>Dendroaeschna conspersa</i>	
Odonata	Urothemistidae	<i>Aethriamanta, Macrodiplax, Urothemis</i>	2006-2009	Libellulidae	<i>Aethriamanta, Macrodiplax, Urothemis</i>	
Trichoptera	Hydroptilidae	<i>Helleythira hiana</i>	2012	Hydroptilidae	<i>Helleythira simplex</i>	
Trichoptera	Hydroptilidae	<i>Orthotrichia capa</i>	2012	Hydroptilidae	<i>Orthotrichia zonata</i>	
Trichoptera	Hydroptilidae	<i>Orthotrichia lapka</i>	2012	Hydroptilidae	<i>Orthotrichia flabella</i>	
Trichoptera	Hydroptilidae	<i>Oxyethira elora</i>	2012	Hydroptilidae	<i>Oxyethira columba</i>	