

Checklist of New Zealand Earthworms updated from Lee (1959)

by R.J. Blakemore August, 2006

COE fellow, Soil Ecology Group, Yokohama National University, Japan.

Summary

This review is based on Blakemore (2004) that updated the work completed over 40 years earlier by Lee (1959) as modified by Blakemore in Lee *et al.*, (2000) and in Glasby *et al.* (2007/8) based on the information presented at the "Species 2000" meeting held Jan. 2000 at Te Papa Museum in Wellington, New Zealand. In the current checklist Acanthodrilidae, Octochaetidae and Megascolecidae sensu Blakemore (2000b) are all given separate family status. Whereas Lee (1959) listed approximately 193 species, the current list has about 199 taxa.

Because many of the natives have few reports, or are based on only a few specimens, approximately 77 listed as "threatened" or "endangered" in Dept. Conservation threatened species list (see [http://www.doc.govt.nz/Conservation/001~Plants-and-Animals/006~Threatened-species/Terrestrial-invertebrate-\(part-one\).asp](http://www.doc.govt.nz/Conservation/001~Plants-and-Animals/006~Threatened-species/Terrestrial-invertebrate-(part-one).asp) April, 2005) and three species are detailed in McGuinness (2001). Further studies such as those of Springett & Grey (1998) are required. Currently I seek funding to complete my database into an interactive guide to species, to use to conduct surveys in New Zealand.

Some of the changes in Blakemore (2004) from Lee (1959) are:

- *Microscolex macquariensis* (Beddard, 1896) is removed from the list because it is known only from Macquarie Island, which is now claimed as Australian territory (see Blakemore, 2000b).
- *Megascolides orthostichon* (Schmarda, 1861) is removed from the fauna as Fletcher (1886: 524) reported that "on the authority of Captain Hutton" this species was not from New Zealand and may be from Mt Wellington in Tasmania (see Blakemore, 2000b).

- *Didymogaster sylvatica* Fletcher is provisionally retained although this Australian species has not been re-confirmed from New Zealand.
- *Rhododrilus* Beddard is primarily a New Zealand genus although introduced and possibly neoendemic species are also found in Tasmania and Australia where *Kayarmaciacia* Jamieson is a new junior synonym.
- Because *Rhododrilus disparatus* Lee is meroic it is transferred as a new combination in *Leucodrilus* Lee.
- *Octochaetus* was recently found to have both exotic (see Blakemore, 1999) and native (see Blakemore, 2000b) Australian representatives, e.g. the native *O. ambrosensis* (Blakemore, 1997) in Queensland where *Neodiplotrema* Dyne is a new junior synonym.
- *Eudinodriloides* Lee and *Sylvodrilus* Lee are retained but it is noted that these genera are perichaetine and anisochaetine, respectively, rather than lumbricine.
- *Plutellus* Perrier species are transferred to *Graliophilus* Jamieson which is believed to have tubular prostates in its type species (originally described as "flattened tubes").
- After Easton (1984), *Pontodrilus matsushimensis chathamianus* Michaelsen is in synonymy of *Pontodrilus litoralis* (Grube) and this genus is now included in Megascolecidae s. Blakemore, 2000b.
- *Megascolides* McCoy is retained, although species with non-tubular prostates are returned or reallocated to *Notoscolex* Fletcher, for which its junior synonym are: *Tokea* Benham, 1904; ?*Nelloscolex* Gates, 1939; ?*Lennoascolex* Gates, 1960; *Pseudonotoscolex* Jamieson, 1971; *Pseudocryptodrilus* : Jamieson, 1974, 2000 (part.) cf. *Megascolides*; *Oreoscolex* Jamieson, 1973; *Araucaridrilus*, Jamieson, 2000; ?*Plutelloides* Jamieson, 2000 (but cf. *Megascolides*) – syns from Blakemore (2000; 2005; 2006). Classical genus lacking nephridial bladders, cf. *Cryptodrilus*.
- Endemic *Perionyx* Perrier species are transferred to *Perionychella* Michaelsen as originally defined, for which *Terriswalkerius*

Jamieson is a junior synonym (see Blakemore, 2000b).

- *Diporochaeta* Beddard is retained with its original definition [includes *Terriswalkerius* Jamieson (part.)].
- *Megascolex* species from Australia and New Zealand are now placed in *Anisochaeta* Beddard, for which *Trichaeta* Spencer, *Spenceriella* Michaelsen, *Gemascolex* Edmonds and Jamieson, *Pericryptodrilus* and *Prophetitima* Jamieson are junior synonyms (see Blakemore, 1997, 2000a, 2002, 2005).
- *Anisochaeta laingii* (Benham) from Norfolk Island was restored from synonym by Blakemore (1997: 1842), it is retained as it was reported from Hamilton, NZ.
- Species that have tubular prostates and previously placed in *Spenceriella* Michaelsen (the neotype of which was stated by Jamieson to have racemose prostates, although this is possibly a mistake - see Blakemore, 1997: 1823) are now in the next available genus, *Celeriella* Gates for which *Pericryptodrilus* Jamieson, 1977 would be a synonym if the prostates are indeed "thickly or flattened tubular" as claimed (but as they appear tubuloracemose then this name belongs in *Anisochaeta*). This is primarily an Indian genus and it is probable that such New Zealand species will eventually be placed in a separate genus.
- Following Lee (1962), *Spenceriella shakespeari* (Benham) is made a junior synonym of *Megascolex antarcticus* Baird which is transferred to *Celeriella* Gates as a new combination.
- The nomenclature of alien megascolecids and lumbricids is updated to mostly comply with Sims and Gerard (1985; 1999) and Blakemore (2002 and 2004).
- Sims & Gerard's (1985; 1999: 48) report of *Bimastos parvus* from NZ is unsubstantiated and is likely confusion with one of the natives named "*parvus*".
- *Dichogaster godeffroyi* (Michaelsen, 1890) [now = *Eutrigaster (Graffia) godeffroyi*] from Haiti (Puerto Plata) had a New Zealand report that was considered undoubtedly incorrect by Michaelsen (1900: 354).

- *Eudrilus eugeniae* Kinberg, 1867 report was similarly dismissed by Lee (1959: 356).
- *Pontoscolex corethrurus* (Müller), *Amyntas gracilis* (Kinberg) and *Amyntas hupeiensis* (Michaelsen) are added to the NZ alien species list following extensive searches of literature by the current author. These were from reports by Michaelsen (1900: 425) who lists *Pontoscolex corethrurus* from NZ; Easton (1981: 53) who reports *Amyntas hupeiensis* from NZ; and Easton (1984: 118) who records *Amyntas gracilis* and *Amyntas corticis* from Raoul Id. (where it was previously identified as *Pheretima clerica* Benham, 1947 and as *Pheretima campestris* Lee, 1952 [this latter taxon was placed in synonymy of *Perichaeta peregrina* Fletcher, 1887 (= *Amyntas corticis*) by Lee (1959: 327) as confirmed by Sims & Easton (1972: 234), nevertheless an unnecessary substitute name *Pheretima medicampestris* Nakamura, 1999 was provided for Lee's species as a homonym of *Perichaeta campestris* Goto and Hatai, 1898 (= *Amyntas robustus*). Under ICZN (1999: Art. 60) this secondary junior homonymy replacement name is unnecessary and invalid since available and valid synonyms exist for the taxon].
- *Perionyx excavatus* Perrier, 1872 and *Dendrobaena veneta* (Rosa, 1886) were identified by the current author in 2001 and 2002 from material sent by Dr Trish Fraser from NZ wormgrowers (see <http://www.crop.cri.nz/home/news/archives/2002/A1035335475.htm> Feb. 2005).

About 200 species are already described; but how many species are there in total in New Zealand? Tasmania which at 67,800 Km² is about one quarter the size of New Zealand (267,000 Km²), has 229 species in 38 genera belonging to 4 families comprising: 202 natives (in 24 genera), 1 neo-endemic species (from Subantarctic Macquarie Island), 23 exotics and 3 translocated mainland species (Blakemore, 2000; 2004; 2005). If New Zealand has a similar diversity then the total would be about 4 times as large, about 900 species. However much of the north island is volcanic and the south island is alpine, so less area is available for earthworm colonization and perhaps we can anticipate a somewhat lesser species total.

Table of New Zealand Phylum Annelida Subphylum Clitellata Class Oligochaeta Order Haplotaxida Suborder Lumbricina (of Sims and Gerard, 1999); families after Blakemore (2000a,b; 2002)

FAMILY/Genus	species	Author (of genus in bold)	Synonyms for native species and (some) genera, plus specific status	Code*
ACANTHODRILIDAE				
<i>Acanthodrilus</i>		Perrier, 1872	<i>Notiodrilus</i> (part.) Michaelsen, 1899; <i>Eodrilus</i> (part.) Michaelsen, 1907	
<i>Acanthodrilus</i>	<i>kermadecensis</i>	Lee, 1953		EK
<i>Decachaetus</i>		Lee, 1959		
<i>Decachaetus</i>	<i>minor</i>	Lee, 1959		E
<i>Decachaetus</i>	<i>violaceus</i>	Lee, 1959		E
<i>Dinodriloides</i>		Benham, 1904		
<i>Dinodriloides</i>	<i>beddardi</i>	Benham, 1904	<i>Dinodriloides annectens</i> Benham, 1906	E
<i>Diplotrema</i>		Spencer, 1900	<i>Notiodrilus</i> (part.) Michaelsen, 1899; <i>Eodrilus</i> Michaelsen, 1907	
<i>Diplotrema</i>	<i>annectens</i>	(Beddard, 1889)		E
<i>Diplotrema</i>	<i>fallax</i>	(Benham, 1909)		E
<i>Diplotrema</i>	<i>haplocystis</i>	(Benham, 1901)		E
<i>Diplotrema</i>	<i>micros</i>	(Lee, 1959)	Comb. Nov.	E
<i>Diplotrema</i>	<i>montana</i>	(Lee, 1959)	Comb. Nov.	E
<i>Diplotrema</i>	<i>pallida</i>	(Lee, 1959)	Comb. Nov.	E
<i>Diplotrema</i>	<i>paludosa</i>	(Beddard, 1892)		E
<i>Diplotrema</i>	<i>parva</i>	(Lee, 1959)	Comb. Nov.	E
<i>Diplotrema</i>	<i>rossi</i>	(Lee, 1959)	Comb. Nov.	E
<i>Eudinodriloides</i>		Lee, 1959		
<i>Eudinodriloides</i>	<i>forsteri</i>	Lee, 1959		E
<i>Maoridrilus</i>		Michaelsen, 1899		
<i>Maoridrilus</i>	<i>alpinus</i>	Lee, 1959		E
<i>Maoridrilus</i>	<i>carnosus</i>	Lee, 1959		E
<i>Maoridrilus</i>	<i>dissimilis</i>	(Beddard, 1885)	<i>Acanthodrilus neglectus</i> Beddard, 1886	E

<i>Maoridrilus</i>	<i>fuscus</i>	Lee, 1959		E
<i>Maoridrilus</i>	<i>gravus</i>	Lee, 1959		E
<i>Maoridrilus</i> ?	<i>intermedius</i>	Michaelsen, 1923	Species incertae sedis	E
<i>Maoridrilus</i> ?	<i>mauiensis</i>	Benham, 1904	Species incertae sedis	E
<i>Maoridrilus</i>	<i>megacystis</i>	Benham, 1919		E
<i>Maoridrilus</i>	<i>michaelseni</i>	Ude, 1905		E
<i>Maoridrilus</i>	<i>minor</i>	Lee, 1959		E
<i>Maoridrilus</i>	<i>modestus</i>	Michaelsen, 1910		E
<i>Maoridrilus</i>	<i>montanus</i>	Lee, 1959		E
<i>Maoridrilus</i>	<i>nelsoni</i>	Lee, 1959		E
<i>Maoridrilus</i>	<i>pallidus</i>	Lee, 1959		E
<i>Maoridrilus</i>	<i>parkeri</i>	(Beddard, 1895)		E
<i>Maoridrilus</i>	<i>plumbeus</i>	(Beddard, 1895)		E
<i>Maoridrilus</i>	<i>purus</i>	Ude, 1905		E
<i>Maoridrilus</i>	<i>ruber</i>	Lee, 1959		E
<i>Maoridrilus</i>	<i>rubicundus</i>	Lee, 1959		E
<i>Maoridrilus</i>	<i>smithi</i>	(Beddard, 1892)		E
<i>Maoridrilus</i>	<i>suteri</i>	Michaelsen, 1922		E
<i>Maoridrilus</i>	<i>tetragonurus</i>	Michaelsen, 1899		E
<i>Maoridrilus</i> ?	<i>thomsoni</i>	Benham, 1919	Species incertae sedis	E
<i>Maoridrilus</i>	<i>transalpinus</i>	Lee, 1959		E
<i>Maoridrilus</i>	<i>uliginosus</i>	(Hutton, 1877)	<i>Acanthodrilus novaezealandicae</i> E Beddard, 1885; <i>Acanthodrilus rosae</i> Beddard, 1889	
<i>Maoridrilus</i>	<i>ultimus</i>	Lee, 1959		E
<i>Maoridrilus</i>	<i>volutus</i>	Lee, 1959		E
<i>Maoridrilus</i>	<i>wilkini</i>	Lee, 1959		E
Microscolex		Rosa, 1887		
<i>Microscolex</i>	<i>aucklandicus aucklandicus</i>	(Benham, 1903)		E
<i>Microscolex</i>	<i>aucklandicus bollonsi</i>	(Benham, 1909)	(Possibly synonymous with nominal E subspecies)	

<i>Microscolex</i>	<i>aucklandicus pallidus</i>	(Benham, 1909)	(Possibly synonymous with nominal E subspecies)	
<i>Microscolex</i>	<i>campbellianus</i>	(Benham, 1905)		E
<i>Microscolex</i>	<i>dubius</i>	(Fletcher, 1887)		A
<i>Microscolex</i>	<i>phosphoreus</i>	(Dugès, 1837)	<i>Microscolex novazelandiae</i> Beddard, A 1894 (corr. <i>novaezelandiae</i>)	
<i>Neochaeta</i>		Lee, 1959		
<i>Neochaeta</i>	<i>forsteri</i>	Lee, 1959		E
<i>Neochaeta</i>	<i>salmoni</i>	Lee, 1959		E
<i>Neodrilus</i>		Beddard, 1887		
<i>Neodrilus</i>	<i>agilis</i>	Lee, 1949		E
<i>Neodrilus</i>	<i>campestris</i>	(Hutton, 1877)	<i>Neodrilus monocystis</i> Beddard, 1887	E
<i>Neodrilus</i>	<i>dissimilis</i>	Lee, 1959		E
<i>Neodrilus</i>	<i>edwardsi</i>	Lee, 1959		E
<i>Neodrilus</i>	<i>polycystis</i>	Lee, 1959		E
<i>Perieodrilus</i>		Michaelsen, 1910		
<i>Perieodrilus</i>	<i>lateralis</i>	(Benham, 1903)		E
<i>Perieodrilus</i>	<i>montanus</i>	(Benham, 1903)		E
<i>Perieodrilus</i>	<i>plunketi</i>	(Benham, 1909)		E
<i>Perieodrilus</i>	<i>ricardi</i>	(Benham, 1903)		E
<i>Plagiochaeta</i>		Benham, 1891		
<i>Plagiochaeta</i>	<i>lineata</i>	(Hutton, 1877)		E
<i>Plagiochaeta</i>	<i>stewartensis</i>	Michaelsen		E
<i>Plagiochaeta</i>	<i>sylvestris</i>	(Hutton, 1877)	<i>Plagiochaeta punctata</i> Benham, 1891	E
<i>Rhododrilus</i>		Beddard, 1889	<i>Leptodrilus</i> Benham 1909; <i>Kayarmaciacia</i> Jamieson, 1997 Syn. Nov.	
<i>Rhododrilus</i>	<i>aduncocystis</i>	Lee, 1952		E
<i>Rhododrilus</i>	<i>agathis</i>	Lee, 1959		E
<i>Rhododrilus</i>	<i>albidus</i>	Lee, 1952		E
<i>Rhododrilus</i>	<i>aquaticus</i>	Lee, 1959		E
<i>Rhododrilus</i>	<i>attenuatus</i>	Lee, 1952		E

<i>Rhododrilus</i>	<i>benhami</i>	Lee, 1952		E
<i>Rhododrilus</i>	<i>besti</i>	Benham, 1904		E
<i>Rhododrilus</i>	<i>cockaynei</i>	Benham, 1905	<i>Rhododrilus cockaynei</i> var. <i>waterfieldi</i>	E
			Benham, 1909; (corr. <i>cockaynei</i>).	
<i>Rhododrilus</i>	<i>dobsoni</i>	Lee, 1959		E
<i>Rhododrilus</i>	<i>edulis</i>	Benham, 1904	Species incertae sedis (meroiic?)	E
<i>Rhododrilus</i>	<i>huttoni</i>	(Benham, 1901)		E
<i>Rhododrilus</i>	<i>insularis</i>	Lee, 1959		E
<i>Rhododrilus</i>	<i>intermedius</i>	Lee, 1952	Species incertae sedis (meroiic?)	E
<i>Rhododrilus</i>	<i>kermadecensis</i>	Benham, 1905	<i>Rhododrilus littoralis</i> Jamieson, 1974	EK
<i>Rhododrilus</i>	<i>leptomerus</i>	Benham, 1905	<i>Leptodrilus magneticus</i> Benham, 1909	E
<i>Rhododrilus</i>	<i>macroseptus</i>	Lee, 1952	Species incertae sedis (meroiic?)	E
<i>Rhododrilus</i>	<i>microgaster</i>	Lee, 1959		E
<i>Rhododrilus</i>	<i>minimus</i>	Lee, 1952		E
<i>Rhododrilus</i>	<i>minutus</i>	Beddard, 1889		E
<i>Rhododrilus</i>	<i>monticola</i>	(Beddard, 1895)	Previous <i>species incertae sedis</i> (gizzard in 8), validated by Lee (1962)	E
<i>Rhododrilus</i>	<i>papaensis</i>	Lee, 1952		E
<i>Rhododrilus</i>	<i>parvus</i>	Benham, 1906		E
<i>Rhododrilus</i>	<i>ravus</i>	Lee, 1959		E
<i>Rhododrilus</i>	<i>robustus</i>	Lee, 1952		E
<i>Rhododrilus</i>	<i>rosae</i>	Lee, 1959		E
<i>Rhododrilus</i>	<i>sexpapillatus</i>	Dyne, 1980		E
<i>Rhododrilus</i>	<i>similis</i>	Benham, 1906		E
<i>Rhododrilus</i>	<i>subtilis</i>	Lee, 1959		E
<i>Rhododrilus</i>	<i>sutherlandi</i>	Lee, 1952		E
<i>Rhododrilus</i>	<i>tetratheca</i>	Lee, 1959		E
<i>Sylvodrilus</i>		Lee, 1959		
<i>Sylvodrilus</i>	<i>gravus</i>	Lee, 1959		E
OCTOCHAETIDAE				
<i>Deinodrilus</i>		Beddard, 1889	<i>Dinodrilus</i> (illegal emend.) Michaelsen,	

			1900; <i>Conicodrilus</i> Benham, 1945.	
<i>Deinodrilus</i>	<i>agilis</i>	Lee, 1952		E
<i>Deinodrilus</i>	<i>benhami</i>	Beddard, 1889		E
<i>Deinodrilus</i>	<i>gracilis</i>	Ude, 1905		E
<i>Deinodrilus</i>	<i>kanieriensis</i>	(Benham, 1945)		E
<i>Deinodrilus</i>	<i>lateralis</i>	Lee, 1959		E
<i>Deinodrilus</i>	<i>montanus</i>	Lee, 1959		E
<i>Deinodrilus</i>	<i>parvus</i>	Lee, 1959		E
<i>Deinodrilus</i>	<i>suteri</i>	Benham, 1906		E
Hoplochaetina		Michaelsen, 1920		
<i>Hoplochaetina</i>	<i>durvilleana</i>	(Benham, 1919)		E
<i>Hoplochaetina</i>	<i>pallida</i>	Lee, 1952		E
<i>Hoplochaetina</i>	<i>polycystis</i>	Lee, 1952		E
<i>Hoplochaetina</i>	<i>robusta</i>	Lee, 1952		E
<i>Hoplochaetina</i>	<i>rossii</i>	(Benham, 1903)		E
<i>Hoplochaetina</i>	<i>rubra</i>	Lee, 1959		E
<i>Hoplochaetina</i>	<i>spirilla</i>	Lee, 1959		E
<i>Hoplochaetina</i>	<i>subtilis</i>	Lee, 1959		E
Leucodrilus		Lee, 1952		
<i>Leucodrilus</i>	<i>digitocystis</i>	Lee, 1952		E
<i>Leucodrilus</i>	<i>disparatus</i>	(Lee, 1952)	Comb. Nov.	E
<i>Leucodrilus</i>	<i>fuscus</i>	Lee, 1952		E
<i>Leucodrilus</i>	<i>robustus</i>	Lee, 1959		E
Octochaetus		Beddard, 1893	<i>Cryptochaeta</i> Benham, 1950 [preocc. non <i>Cryptochetum</i> Rondani 1876 (Diptera)] placed in synonymy by Lee (1959: 104); <i>Neodiplotrema</i> Dyne, 1997.	
<i>Octochaetus</i>	<i>antarcticus</i>	(Beddard, 1889)		E
<i>Octochaetus</i>	<i>brucei</i>	Lee, 1952		E
<i>Octochaetus</i>	<i>huttoni</i>	Beddard, 1892		E

<i>Octochaetus</i>	<i>kapitiensis</i>	Lee, 1959		E
<i>Octochaetus</i> ?	<i>levis</i>	(Hutton, 1877)	Species incertae sedis	E
<i>Octochaetus</i>	<i>michaelseni</i>	Benham, 1904		E
<i>Octochaetus</i> ?	<i>microchaetus</i>	(Benham, 1950)	Type of <i>Cryptochaeta</i> Benham, 1950.	E
			Species incertae sedis	
<i>Octochaetus</i>	<i>multiporus</i>	(Beddard, 1885)	Michaelsen (1900: 319) put <i>thomasi</i> in	E
			synonymy; cf. Lee (1959: 115)	
<i>Octochaetus</i>	<i>pelorus</i>	Lee, 1959		E
<i>Octochaetus</i>	<i>ravus</i>	Lee, 1959		E
<i>Octochaetus</i>	<i>sylvestris</i>	Lee, 1952		E
<i>Octochaetus</i>	<i>thomasi</i>	Beddard, 1893	Sometimes dated "1892".	E
<i>Octochaetus</i>	<i>tricystis</i>	Lee, 1952		E
MEGASCOLECIDAE				
Amynthas		Kinberg, 1867		A
<i>Amynthas</i>	<i>corticis</i>	(Kinberg, 1867)		A
<i>Amynthas</i>	<i>gracilis</i>	(Kinberg, 1867)		AK
<i>Amynthas</i>	<i>hupeiensis</i>	(Michaelsen, 1895)		A
Anisochaeta		Beddard, 1890	<i>Trichaeta</i> Spencer, 1900; <i>Spenceriella</i> Michaelsen, 1907; <i>Gemascolex</i> Edmonds & Jamieson, 1973; <i>Pericryptodrilus</i> Jamieson 1977; <i>Prophetitima</i> Jamieson, 1975.	
<i>Anisochaeta</i>	<i>animae</i>	(Lee, 1959)	Comb. Nov.	E
<i>Anisochaeta</i>	<i>laingii</i>	(Benham, 1903)	Comb. Nov.	
<i>Anisochaeta</i>	<i>novaezealandiae</i>	(Lee, 1952)	Comb. Nov. [Misspelt "novaezealandiae" in Reynolds & Cook, 1979:146].	E
Celeriella				
<i>Celeriella</i>	<i>antarctica</i>	(Baird, 1871)	<i>Diporochaeta shakespeari</i> Benham, 1906; Comb. Nov.	E
<i>Celeriella</i>	<i>argillae</i>	(Lee, 1959)	Comb. Nov.	E

<i>Celeriella</i>	<i>gigantea</i>	(Benham, 1906)	Comb. Nov.	E
<i>Celeriella</i>	<i>pallida</i>	(Lee, 1959)	Species incertae sedis (prostates tubuloracemose?); Comb. Nov.	E
<i>Didymogaster</i>		Fletcher, 1886		
<i>Didymogaster</i>	<i>sylvatica</i>	Fletcher, 1886		A
<i>Diporochoaeta</i>		Beddard, 1890		
<i>Diporochoaeta</i>	<i>aquatica</i>	Benham, 1903		E
<i>Diporochoaeta</i>	<i>brachysoma</i>	Benham, 1909		E
<i>Diporochoaeta</i>	<i>caswelli</i>	Lee, 1959		E
<i>Diporochoaeta</i>	<i>chathamensis</i>	Benham, 1901		E
<i>Diporochoaeta</i>	<i>duodecimalis</i>	(Michaelsen, 1923)		E
<i>Diporochoaeta</i>	<i>heterochaeta</i>	Benham, 1909		E
<i>Diporochoaeta</i>	<i>intermedia</i>	Beddard, 1889	<i>Perichaeta novae-zelandiae</i> Beddard, 1888; <i>Diporochoaeta intermedia taipo</i> Jamieson, 1976. Syn. nov.	E
<i>Diporochoaeta</i>	<i>minima</i>	Lee, 1959		E
<i>Diporochoaeta</i>	<i>obtusa</i>	Lee, 1952		E
<i>Diporochoaeta</i>	<i>punctata</i>	Lee, 1959	Misspelt "puctata" in Reynolds & Cook, 1976: 160.	E
<i>Graliophilus</i>		Jamieson, 1971		
<i>Graliophilus</i>	<i>aucklandicus</i>	(Benham, 1909)	Comb. Nov.	E
<i>Graliophilus</i>	<i>parvus</i>	(Lee, 1959)	Comb. Nov.	E
<i>Graliophilus</i>	<i>stewartensis</i>	(Lee, 1959)	Comb. Nov.	E
<i>Megascolides</i>		McCoy, 1878		
<i>Megascolides</i>	<i>albus</i>	Lee, 1952	(Corr. <i>alba</i> Lee, 1952).	E
<i>Megascolides</i>	<i>fuscus</i>	Lee, 1952		E
<i>Megascolides</i>	<i>irregularis</i>	Lee, 1952		E
<i>Megascolides</i>	<i>neglectus</i>	Cognetti, 1909		E
<i>Megascolides</i>	<i>parvus</i>	Lee, 1952		E
<i>Megascolides</i>	<i>raglani</i>	Lee, 1952		E
<i>Megascolides</i>	<i>reptans</i>	(Ude, 1905)		E

<i>Megascolides</i>	<i>ruber</i>	Lee, 1952		E
<i>Megascolides</i>	<i>rubicundus</i>	Lee, 1959	Misspelt "ribicundus" in Reynolds & Cook, 1976: 165.	E
<i>Megascolides</i>	<i>tasmani</i>	Lee, 1959		E
<i>Megascolides</i>	<i>unipapillatus</i>	(Ude, 1905)		E
<i>Megascolides</i>	<i>viridis</i>	Lee, 1952		E
Notoscolex				
<i>Notoscolex</i>	<i>equestris</i>	Benham, 1942		E
<i>Notoscolex</i>	<i>esculenta</i>	(Benham, 1904)		E
<i>Notoscolex</i>	<i>hakeaphilus</i>	Benham, 1949		E
<i>Notoscolex</i>	<i>huttoni</i>	(Benham, 1904)		E
<i>Notoscolex</i>	<i>kirki</i>	(Benham, 1904)		E
<i>Notoscolex</i>	<i>maorica</i>	(Benham, 1904)		E
<i>Notoscolex</i>	<i>mortenseni</i>	(Michaelsen, 1923)		E
<i>Notoscolex</i>	<i>napiensis</i>	Benham, 1941		E
<i>Notoscolex</i>	<i>sapida</i>	(Benham, 1904)		E
<i>Notoscolex</i>	<i>suteri</i>	(Benham, 1904)		E
<i>Notoscolex</i>	<i>urewerae</i>	(Benham, 1904)		E
Perionychella				
<i>Perionychella</i>	<i>egmonti</i>	(Lee, 1952)	Comb. Nov.	E
<i>Perionychella</i>	<i>helophila</i>	(Benham, 1909)	Comb. Nov.	E
<i>Perionychella</i>	<i>perionychopsis</i>	(Benham, 1909)	Comb. Nov.	E
<i>Perionychella</i>	<i>shoerana</i>	(Cognetti, 1912)	Comb. Nov.	E
Pontodrilus				
<i>Pontodrilus</i>	<i>lacustris</i>	(Benham, 1903)		E
<i>Pontodrilus</i>	<i>litoralis</i>	(Grube, 1855)	<i>Pontodrilus matushimensis</i> <i>chathamianus</i> Michaelsen, 1899; (for other synonyms, see Blakemore, 2002)	
Perionyx				
<i>Perionyx</i>	<i>excavatus</i>	Perrier, 1872	New record New Zealand.	A
GLOSSOSCOLECIDAE				

<i>Pontoscolex</i>	<i>corethrurus</i>	(Müller, 1857)	Sometimes misdated "1856".	A
LUMBRICIDAE				
<i>Allolobophora</i>	<i>chlorotica</i>	(Savigny, 1826)		A
<i>Allolobophoridella</i>	<i>eiseni</i>	(Levinsen, 1884)		A
<i>Aporrectodea</i>	<i>caliginosa</i>	(Savigny, 1826)		A
<i>Aporrectodea</i>	<i>longa</i>	(Ude, 1885)		A
<i>Aporrectodea</i>	<i>rosea</i>	(Savigny, 1826)		A
<i>Aporrectodea</i>	<i>trapezoides</i>	(Dugès, 1828)		A
<i>Aporrectodea</i>	<i>tuberculata</i>	(Eisen, 1874)		A
<i>Dendrobaena</i>	<i>veneta</i>	(Rosa, 1886)	New record New Zealand (RJB).	A
<i>Dendrodrilus</i>	<i>rubidus rubidus</i>	(Savigny, 1826)		A
<i>Eisenia</i>	<i>andrei</i>	Bouché, 1972	(Possibly synonymous with <i>E. fetida</i>)	A
<i>Eisenia</i>	<i>fetida</i>	(Savigny, 1826)		A
<i>Eiseniella</i>	<i>tetraedra</i>	(Savigny, 1826)		A
<i>Lumbricus</i>	<i>castaneus</i>	(Savigny, 1826)		A
<i>Lumbricus</i>	<i>rubellus</i>	Hoffmeister, 1843		A
<i>Lumbricus</i>	<i>terrestris</i>	Linnaeus, 1758		A
<i>Octolasion</i>	<i>cyaneum</i>	(Savigny, 1826)		A
<i>Octolasion</i>	<i>tyrtaeum lacteum</i>	(Örley, 1881)		A

*Code: **A= alien or exotic; E= endemic or native; K= Kermadec Islands.**

References

- Blakemore, R.J. (1997). Two new genera and some new species of Australian earthworms (Acanthodrilidae, Megascolecidae: Oligochaeta). *Journal of Natural History* 31, 1785-1848.
- Blakemore, R.J. (2000a). New species of the earthworm genus *Anisochaeta* from New South Wales. *Records of the Australian Museum* 52(1), 1-40.
- Blakemore, R.J. (2000b). *Tasmanian Earthworms*. CD-ROM Monograph with Review of World Families. VermEcology, Kippax 2615. Canberra, December, 2000, pp. 800 including 222 figures.
- Blakemore, R.J. (2002). *Cosmopolitan Earthworms – an Eco-Taxonomic Guide to the Peregrine Species of the World*. VermEcology, PO BOX 414 Kippax, ACT 2615, Australia, pp. 506 including 80 figs.
- Blakemore, R.J. (2004). *Checklist of New Zealand Earthworms updated from Lee (1959)*. In: Moreno, A. G. and Borges, S. (eds.) "Avances en taxonomia de lombrices de tierra/Advances in earthworm taxonomy (Annelida: Oligochaeta)". Editorial Complutense, Universidad Complutense, Madrid, Spain. Pp. 175-185. [Published July, 2004 in English with some Spanish translation].
- Blakemore, R.J. (2005). *A Series of Searchable Texts on Earthworm Biodiversity, Ecology and Systematics from Various Regions of the World*. Eds. N. Kaneko & M.T. Ito. COE Soil Ecology Research Group, Yokohama National University, Japan. CD-ROM. [<http://bio-eco.eis.ynu.ac.jp/eng/database/earthworm/>].
- Blakemore, R.J. (2006). *A Series of Searchable Texts on Earthworm Biodiversity, Ecology and Systematics from Various Regions of the World. Version II*. Eds. N. Kaneko & M.T. Ito. COE Soil Ecology Research Group, Yokohama National University, Japan. CD-ROM. [<http://bio-eco.eis.ynu.ac.jp/eng/database/earthworm/>].
- Easton, E.G. (1981). Japanese earthworms: a synopsis of the Megadrile species (Oligochaeta). *Bulletin of the British Museum (Natural*

- History) Zoology* 40(2), 33-65. [Note: this paper often miscited as Easton (1980)].
- Easton, E.G. (1984). Earthworms (Oligochaeta) from islands of the south-western Pacific, and a note on two species from Papua New Guinea. *New Zealand Journal of Zoology* 11, 111-128.
- Glasby, Christopher J., Geoffrey B. Read, Kenneth E. Lee, Robert J. Blakemore, Patricia M. Fraser, Adrian M. Pinder, Christer Erséus, William E. Moser, Eugene M. Burreson, Fredric R. Govedich, Ronald W. Davies, Elliot W. Dawson (2007/8). *Phylum Annelida: Bristle-worms, Earthworms, Leeches*. Chapter in NZ Spp2000 Report edited by Dennis Gordon. NIWA, Wellington, NZ.
- Lee, K.E. (1959). The earthworm fauna of New Zealand. *New Zealand Department of Scientific & Industrial Research Bulletin* 130, pp. 486.
- Lee, K.E., Blakemore, R.J., Fraser, P., (2000). *Noke a Aotearoa - The Earthworms of NZ*. The New Zealand Inventory of Biodiversity: A Species 2000 Symposium Review. (Submitted Feb, 2000).
- McGuinness, C. A. (2001). Conservation requirements of New Zealand's nationally threatened invertebrates. *Threatened Species Occasional Publication* 20. 658 pp.
[<http://www.doc.govt.nz/Publications/004~Science-and-Research/Biodiversity-Recovery-Unit/PDF/tsop20b.pdf>]
- Michaelsen, W. (1900). *Das Tierreich, 10: Vermes, Oligochaeta*, pp. 1-575. [In German].
- Reynolds, J.W., D.C. Cook (1976). *Nomenclatura Oligochaetologica: A Catalogue of Names, Descriptions and Type Specimens of the Oligochaeta*. University of New Brunswick, Fredericton, Canada, pp. 216.
- Springett, J.A., Gray, R.A.J. (1998). Short communication. Burrowing behaviour of the New Zealand indigenous earthworm *Octochaetus multiporus* (Megascolecidae: Oligochaeta). *New Zealand Journal of Ecology* 22(1): 95-97.

Sims, R.W., Gerard, B.M. (1985). Earthworms: Keys and notes to the identification and study of the Species. *Synopsis of the British Fauna (New series)*, E.J. Brill, Leiden. No. 31, pp. 1-171.

Sims, R. W., Gerard, B.M. (1999). *Earthworms: Notes for the identification of British species. 4th Edition*. Published for The Linnean Society of London and The Estuarine and Coastal Sciences Association by Field Studies Council, Montford Bridge, Shrewsbury, UK, pp 1-169.

[End of NZ species checklist, originally 27th May, 2005]