

# ANNOTATED LIST OF THE NON-MARINE MOLLUSCA OF BRITAIN AND IRELAND

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## Foreword

The list which follows is based upon a published list which appeared in a recent edition of the *Journal of Conchology* (Anderson, R. 2005 *J. Conch. Lond.* **38**(6): 607-637).

This has been revised in the light of comments received since its publication, notably a critique by Bank *et al.* (2007), members of the original Clecom team, which has appeared in the form of an alternative British list in the journal *Heldia*.

Readers should note especially the following changes to species names: substitution of *Oxyloma sarsii* for *Oxyloma sarsi* (misspelling); substitution of *Mytilopsis leucophaeata* for *Mytilopsis leucophaeta* (misspelling); correction of *Succinella oblonga* Draparnaud to the correctly parenthesized *Succinella oblonga* (Draparnaud); substitution of *Anisus spirorbis* (Linnaeus), for the incorrect rendering *Anisus spirorbis* Linnaeus; and of *Hydrobia acuta neglecta* Muus for the incorrect *Hydrobia acuta neglecta* (Muus).

Alterations to author names, family names and to dates in the original Clecom List as given by Bank *et al.* (2007) are also included here. I lack access to early literature quoted by these authors but have no hesitation in accepting the changes and updates given in their checklist. Revision of the present British list has also involved the correction of typographical errors, revision of authors' names to include initials in cases where these were omitted but where confusion with other authors of the same surname is possible, and the inclusion of all accepted subgenera where some of these were previously omitted.

I have tried to adopt taxonomic ranking and names on the basis of DNA studies where these are available and/or appropriate to the taxa in question. The position taken by Anderson (2005) with regard to the taxonomic rank of *Stagnicola* is a case in point. *Stagnicola* was placed as a subgenus of *Lymnaea* on the basis of molecular evidence of ranking provided by Bargaes *et al.* (2001). However, when segregates of the aggregate species *Lymnaea palustris* were introduced to the British list by Carr & Killeen (2003), a variant of this was employed i.e. *Stagnicola* was used as a genus name rather than as a subgenus name. This follows wider continental European practice. As part of a watching brief on this issue the recent publications of Bargaes and associates have been studied. Essentially Bargaes and collaborators have maintained the opinion that the European stagnicolines should be regarded as belonging to a subgenus of *Lymnaea* rather than as a self-standing genus (Bargaes *et al.* 2003, Bargaes & Mas-Coma 2005). The position taken in Anderson (2005) therefore requires no change. However, the specific name for the commonest British stagnicoline, *Lymnaea fusca* is grammatically incorrect. A change to *Lymnaea (Stagnicola) fuscus* is made in the current list.

The use of subspecies names has been debated and some changes are made in this area. Anderson (2005) included only two subspecies (*Hydrobia acuta neglecta* and *Oxychilus navarricus helveticus*) within the original list but Bank *et al.* (2007) make a case for re-considering a number of other instances in which well characterised subspecies are known in continental Europe. For instance, the work of Schütt (1986) has demonstrated

that *Theodoxus fluviatilis* is polytypic within its range and form found in Britain and Ireland is accordingly now called *Theodoxus fluviatilis fluviatilis*. The same is true for *Discus rotundatus*, now called *Discus rotundatus rotundatus*, and for *Balea biplicata*, *Clausilia bidentata*, *Arianta arbustorum*, *Cepaea nemoralis*, *Helicigona lapicida*, *Theba pisana*, *Helicodonta obvoluta* and *Planorbarius corneus*, all nominotypical forms. With the recognition of subspecies designations comes the problem of which to recognise if there is more than one in our geographical area. Difficulty arises, for instance, with *Trochulus striolatus abludens* and *Clausilia dubia suttoni*. *Trochulus striolatus abludens* is said to be restricted to north-west Europe including the British Isles. However, it is unclear whether the invasive and highly variable populations now found across the British Isles can be unambiguously distinguished from forms found elsewhere in Europe. Until the matter is resolved the default position of ignoring the subspecies designation is adopted. The case of *Clausilia dubia* is much more clear cut. There is good evidence for a relict form (*suttoni* Westerlund 1881) found in northern England being distinct morphologically from the nominotypical subspecies *dubia* Draparnaud 1805 found as an immigrant at Dover (Dean 1914). Both subspecies are therefore recognized.

Please note that the recommended ICZN format for subspecies has now been adopted i.e. a trinomial with author for the subspecies name only. If the subspecies in our area is not nominotypical then there may be a difficulty as details of the author are omitted from the species name. This appears in only one or two cases, however.

## CLASS GASTROPODA CUVIER 1795

### ORDER NERITOPSINA COX & KNIGHT 1960

#### FAMILY NERITIDAE Rafinesque 1815

Genus *Theodoxus* Montfort 1810

Subgenus *Theodoxus* Montfort 1810

*Theodoxus fluviatilis fluviatilis* (Linnaeus 1758)

GB IRE

### ORDER ARCHITAENIOGLOSSA HALLER 1892

#### FAMILY ACICULIDAE J. E. Gray 1850

Genus *Acicula* W. Hartmann 1821

*Acicula fusca* (Montagu 1803) GB IRE

FAMILY VIVIPARIDAE J. E. Gray 1847 (1833)

Genus *Viviparus* Montfort 1810

*Viviparus contectus* (Millet 1813) GB

*Viviparus viviparus viviparus* (Linnaeus 1758) GB IRE

ORDER NEOTAENIOGLOSSA HALLER 1892

FAMILY AMNICOLIDAE Tryon 1866

Hydrobiidae auct. partim

Genus *Marstoniopsis* van Regteren Altena 1936

*Marstoniopsis insubrica* (Küster 1853)<sup>1</sup> GB  
*scholtzi* (A. Schmidt 1856)

FAMILY ASSIMINEIDAE H. & A. Adams 1856

Genus *Assiminea* Fleming 1828

Subgenus *Assiminea* Fleming 1828

*Assiminea grayana* Fleming 1828 GB IRE

Genus *Paludinella* L. Pfeiffer 1841

Subgenus *Paludinella* L. Pfeiffer 1841

*Paludinella littorina* (Delle Chiaje 1828) GB

FAMILY BITHYNIIDAE J. E. Gray 1857

Genus *Bithynia* Leach 1818

Subgenus *Bithynia* Leach 1818

*Bithynia tentaculata* (Linnaeus 1758) GB IRE

Subgenus *Codiella* Locard 1894

*Bithynia leachii* (Sheppard 1823) GB IRE

FAMILY COCHLIOPIDAE Tryon 1866  
Hydrobiidae auct. partim

Genus *Heleobia* Stimpson 1865  
Subgenus *Semisalsa* Radoman 1974

*Heleobia stagnorum* (Gmelin 1791) GB

FAMILY HYDROBIIDAE Stimpson 1865

Genus *Hydrobia* W. Hartmann 1821

*Hydrobia acuta neglecta* Muus 1963<sup>2</sup> GB IRE  
*ventrosa* auct. partim non Montagu 1803

Genus *Mercuria* Boeters 1971  
*Pseudammicola* Paulucci 1878 partim

*Mercuria* cf. *similis* (Draparnaud 1805)<sup>3</sup> GB IRE  
*confusa* auct. non (Frauenfeld 1863)

Genus *Peringia* Paladilhe 1874  
*Hydrobia* W. Hartmann 1821 partim

*Peringia ulvae* (Pennant 1777)<sup>4</sup> GB IRE

Genus *Potamopyrgus* Stimpson 1865

*Potamopyrgus antipodarum* (J. E. Gray 1843) GB IRE  
*jenkinsi* (E. A. Smith 1889)

Genus *Ventrosia* Radoman 1977  
*Hydrobia* W. Hartmann 1821 partim

*Ventrosia ventrosa* (Montagu 1803)<sup>5</sup> GB IRE

FAMILY POMATIIDAE Newton 1891 (1828)  
Pomatiasidae auct. partim

Genus *Pomatias* S. Studer 1789

*Pomatias elegans* (O. F. Müller 1774) GB IRE

FAMILY TRUNCATELLIDAE J. E. Gray 1840

Genus *Truncatella* Risso 1826

*Truncatella subcylindrica* (Linnaeus 1767) GB IRE

ORDER ECTOBRANCHIA P. FISCHER 1884

FAMILY VALVATIDAE J. E. Gray 1840

Genus *Valvata* O. F. Müller 1773

Subgenus *Cincinna* Hübner 1810

*Valvata piscinalis* (O. F. Müller 1774) GB IRE

Subgenus *Tropidina* H. & A. Adams 1854

*Valvata macrostoma* Mörch 1864 GB

Subgenus *Valvata* O. F. Müller 1773

*Valvata cristata* O. F. Müller 1774 GB IRE

ORDER PULMONATA CUVIER IN BLAINVILLE 1814

FAMILY ACROLOXIDAE Thiele 1931

Genus *Acroloxus* H. Beck 1838

*Acroloxus lacustris* (Linnaeus 1758) GB IRE

FAMILY AGRILIMACIDAE H. Wagner 1935

Genus *Deroceras* Rafinesque 1820

Subgenus *Deroceras* Rafinesque 1820

*Deroceras agreste* (Linnaeus 1758)<sup>6</sup> GB IRE

*Deroceras laeve* (O. F. Müller 1774) GB IRE

*Deroceras panormitanum* (Lessona & Pollonera 1882)  
*caruanae* (Pollonera 1891) GB IRE

*Deroceras reticulatum* (O. F. Müller 1774) GB IRE

FAMILY ARIONIDAE J. E. Gray 1840

Genus *Arion* A. Férussac 1819

Subgenus *Arion* A. Férussac 1819

*Arion ater* (Linnaeus 1758) GB IRE

*Arion flagellus* Collinge 1893 GB IRE  
*lusitanicus* auct. Brit. non J. Mabilie 1868

*Arion rufus* (Linnaeus 1758)<sup>7</sup> GB IRE

*Arion vulgaris* Moquin-Tandon 1855<sup>7a</sup> GB IRE  
*lusitanicus* auct. non J. Mabilie 1868

Subgenus *Mesarion* P. Hesse 1926

*Arion fuscus* (O. F. Müller 1774) IRE

*Arion subfuscus* (Draparnaud 1805) GB IRE

Subgenus *Carinarion* P. Hesse 1926

*Arion circumscriptus* Johnston 1828 GB IRE

*Arion fasciatus* (Nilsson 1823) GB IRE

*Arion silvaticus* Lohmander 1937 GB IRE

Subgenus *Kobeltia* Seibert 1873

*Arion distinctus* J. Mabilie 1868 GB IRE  
*hortensis* auct. non A. Férussac 1819

*Arion hortensis* A. Férussac 1819 GB IRE

*Arion intermedius* Normand 1852 GB IRE

*Arion occultus* Anderson 2004<sup>9</sup> IRE

*Arion owenii* Davies 1979 GB IRE  
*hortensis* auct. non A. Férussac 1819

Genus *Geomalacus* Allman 1843

Subgenus *Geomalacus* Allman 1843

*Geomalacus maculosus* Allman 1843 IRE

FAMILY BOETTGERILLIDAE Wiktor & I. M. Likharev 1979

Genus *Boettgerilla* Simroth 1910

*Boettgerilla pallens* Simroth 1912 GB IRE

FAMILY BRADYBAENIDAE Pilsbry 1934 (1898)

Genus *Fruticicola* Held 1838

*Fruticicola fruticum* (O. F. Müller 1774) GB(E)

FAMILY CARYCHIIDAE Jeffreys 1830

Genus *Carychium* O. F. Müller 1773

Subgenus *Carychium* O. F. Müller 1773

*Carychium minimum* O. F. Müller 1774 GB IRE

Subgenus *Saraphia* Risso 1826

*Carychium tridentatum* (Risso 1826) GB IRE

FAMILY CHONDRINIDAE Steenberg 1925

Genus *Abida* Turton 1831

*Abida secale secale* (Draparnaud 1801) GB

FAMILY CLAUSILIIDAE J. E. Gray 1855

Genus *Alinda* H. & A. Adams 1855

*Alinda biplicata biplicata* (Montagu 1803) GB

Genus *Balea* J. E. Gray 1824

Subgenus *Balea* J. E. Gray 1824

*Balea perversa* (Linnaeus 1758) GB IRE

*Balea heydeni* Von Maltzan 1881<sup>10</sup> GB IRE

Genus *Clausilia* Draparnaud 1805

Subgenus *Clausilia* Draparnaud 1805

*Clausilia bidentata bidentata* (Ström 1765) GB IRE

Subgenus *Andraea* L. Pfeiffer 1848

*Clausilia dubia dubia* Draparnaud 1805 GB

*Clausilia dubia suttoni* Westerlund 1881 GB

Genus *Cochlodina* A. Férussac 1821

Subgenus *Cochlodina* A. Férussac 1821

*Cochlodina laminata* (Montagu 1803) GB IRE

Genus *Macrogastra* W. Hartmann 1841

Subgenus <i>Pseudovestia</i> Nordsieck 1977	
<i>Macrogastra rolphii</i> (Turton 1826)	GB
Genus <i>Papillifera</i> W. Hartmann 1842	
<i>Papillifera bidens</i> (Linnaeus, 1758) <sup>10a</sup>	GB
FAMILY COCHLICELLIDAE Schileyko 1972 <sup>11</sup>	
Genus <i>Cochlicella</i> A. Férussac 1821	
Subgenus <i>Cochlicella</i> A. Férussac 1821	
<i>Cochlicella acuta</i> (O. F. Müller 1774)	GB IRE
Subgenus <i>Prietocella</i> Schileyko & Menkhorst 1997 <sup>12</sup>	
<i>Cochlicella barbara</i> (Linnaeus 1758)	GB
FAMILY COCHLICOPIDAE Pilsbry 1900 (1879)	
Genus <i>Azecca</i> Fleming 1828	
<i>Azecca goodalli</i> (A. Férussac 1821)	GB
Genus <i>Cochlicopa</i> A. Férussac 1821 <sup>13</sup>	
<i>Cochlicopa</i> cf. <i>lubrica</i> (O. F. Müller 1774)	GB IRE
<i>Cochlicopa</i> cf. <i>lubricella</i> (Rossmässler 1834)	GB IRE
FAMILY DISCIDAE Thiele 1931 (1866)	
Genus <i>Discus</i> Fitzinger 1833	
Subgenus <i>Gonyodiscus</i> Fitzinger 1833	
<i>Discus rotundatus rotundatus</i> (O. F. Müller 1774)	GB IRE
FAMILY ELLOBIIDAE L. Pfeiffer 1854 (1822)	
Genus <i>Leucophytia</i> Winckworth 1949	
<i>Leucophytia bidentata</i> (Montagu 1808)	GB IRE
Genus <i>Myosotella</i> Monterosato 1906 <sup>14</sup>	
<i>Ovatella</i> Bivona 1832 partim	
<i>Myosotella denticulata</i> (Montagu 1803) <sup>15</sup>	GB IRE
<i>Myosotella myosotis</i> (Draparnaud 1801)	GB IRE



FAMILY ENIDAE Woodward 1903 (1880)

Genus *Ena* Turton 1831

*Ena montana* (Draparnaud 1801)

GB

Genus *Merdigera* Held 1838<sup>16</sup>

*Ena* Turton 1831 auct.

*Merdigera obscura* (O. F. Müller 1774)

GB IRE

FAMILY EUCONULIDAE H. B. Baker 1928

Genus *Euconulus* Reinhardt 1883<sup>17</sup>

Subgenus *Euconulus* Reinhardt 1883

*Euconulus* cf. *alderi* (J. E. Gray 1840)

GB IRE

*Euconulus* cf. *fulvus* (O. F. Müller 1774)

GB IRE

FAMILY FERUSSACIIDAE Bourguignat 1883

Genus *Cecilioides* A. Férussac 1814

Subgenus *Cecilioides* A. Férussac 1814

*Cecilioides acicula* (O. F. Müller 1774)

GB IRE

FAMILY GASTRODONTIDAE Tryon 1866

Genus *Zonitoides* Lehmann 1862

Subgenus *Zonitoides* Lehmann 1862

*Zonitoides excavatus* (Alder 1830)

GB IRE

*Zonitoides nitidus* (O. F. Müller 1774)

GB IRE

FAMILY HELICIDAE Rafinesque 1815

Genus *Arianta* Turton 1831

*Arianta arbustorum arbustorum* (Linnaeus 1758)

GB IRE

Genus *Cepaea* Held 1838

Subgenus *Cepaea* Held 1838

*Cepaea nemoralis nemoralis* (Linnaeus 1758) GB IRE

*Cepaea hortensis* (O. F. Müller 1774) GB IRE

Genus **Cornu** Born 1778

*Helix* Linnaeus 1758 partim

*Cantareus* Risso 1826

*Cryptomphalus* Charpentier 1837

*Cornu aspersum* (O. F. Müller 1774)<sup>18</sup> GB IRE

Genus **Helicigona** A. Férussac 1821

*Helicigona lapicida lapicida* (Linnaeus 1758) GB IRE

Genus **Helix** Linnaeus 1758

Subgenus **Helix** Linnaeus 1758

*Helix pomatia* Linnaeus 1758 GB

Genus **Theba** Risso 1826

*Theba pisana pisana* (O. F. Müller 1774) GB IRE

FAMILY HELICODISCIDAE H. B. Baker 1927

Genus **Lucilla** R. T. Lowe 1852

*Helicodiscus* Morse 1864 partim

*Hebetodiscus* H. B. Baker 1929

*Lucilla singleyana* (Pilsbry 1889)<sup>19</sup> GB

FAMILY HELICODONTIDAE Kobelt 1904

Genus **Helicodonta** A. Férussac 1821

*Helicodonta obvoluta obvoluta* (O. F. Müller 1774) GB

FAMILY HYGROMIIDAE Tryon 1866

Genus **Ashfordia** J. W. Taylor 1917

*Ashfordia granulata* (Alder 1830) GB IRE

Genus **Candidula** Kobelt 1871

*Candidula gigaxii* (L. Pfeiffer 1848) GB IRE

*Candidula intersecta* (Poiret 1801) GB IRE

Genus <i>Cerneuella</i> Schlüter 1838	
Subgenus <i>Cerneuella</i> Schlüter 1838	
<i>Cerneuella aginnica</i> (Locard 1894) <sup>20</sup>	GB
<i>Cerneuella virgata</i> (Da Costa 1778)	GB IRE
Subgenus <i>Xerocincta</i> Monterosato 1892	
<i>Cerneuella neglecta</i> (Draparnaud 1805)	GB(E)
Genus <i>Helicella</i> A. Férussac 1821	
<i>Helicella itala itala</i> (Linnaeus 1758)	GB IRE
Genus <i>Hygromia</i> Risso 1826	
Subgenus <i>Hygromia</i> Risso 1826	
<i>Hygromia cinctella</i> (Draparnaud 1801)	GB IRE
Subgenus <i>Riedelia</i> Schileyko 1972	
<i>Hygromia limbata limbata</i> (Draparnaud 1805)	GB
Genus <i>Monacha</i> Fitzinger 1833	
Subgenus <i>Monacha</i> Fitzinger 1833	
<i>Monacha cantiana</i> (Montagu 1803)	GB
<i>Monacha cartusiana</i> (O. F. Müller 1774)	GB
Genus <i>Ponentina</i> P. Hesse 1921	
<i>Ponentina subvirescens</i> (Bellamy 1839)	GB
Genus <i>Pseudotrichia</i> Schileyko 1970	
<i>Perforatella</i> Schlüter 1838 partim	
<i>Pseudotrichia rubiginosa</i> (Rossmässler 1838)	GB
Genus <i>Trochoidea</i> Brown 1827	
Subgenus <i>Trochoidea</i> Brown 1827	
<i>Trochoidea elegans</i> (Gmelin 1791)	GB
Genus <i>Trochulus</i> Chemnitz 1786 <sup>21</sup>	
<i>Trichia</i> W. Hartmann 1840 non de Haan 1839 [Crustacea Brachyura]	
Subgenus <i>Trochulus</i> Chemnitz 1786	
<i>Trochulus hispidus</i> (Linnaeus 1758)	GB IRE
<i>Trochulus sericeus</i> (Draparnaud 1801) <sup>22</sup>	GB
<i>plebeius</i> auct. non (Draparnaud 1805)	

*Trochulus striolatus* (C. Pfeiffer 1828) GB IRE

Genus *Zenobiella* Gude & Woodward 1921

*Perforatella* Schlüter 1838 partim<sup>23</sup>

*Zenobiella subrufescens* (J. S. Miller 1822) GB IRE

FAMILY LAURIIDAE Steenberg 1925

Genus *Lauria* J. E. Gray 1840

Subgenus *Lauria* J. E. Gray 1840

*Lauria cylindracea* (Da Costa 1778) GB IRE

*Lauria sempronii* (Charpentier 1837) GB

Genus *Leiostyla* R. T. Lowe 1852

Subgenus *Leiostyla* R. T. Lowe 1852

*Leiostyla anglica* (A. Férussac 1821) GB IRE

FAMILY LIMACIDAE Lamarck 1801

Genus *Lehmannia* Heynemann 1863

*Limax* Linnaeus 1758 partim

*Lehmannia marginata* (O. F. Müller 1774) GB IRE

*Lehmannia nyctelia* (Bourguignat 1861)<sup>24</sup> GB

*Lehmannia valentiana* (A. Férussac 1822) GB IRE

Genus *Limacus* Lehmann 1864

*Limax* Linnaeus 1758 partim

*Limacus flavus* (Linnaeus 1758) GB IRE

*Limacus maculatus* (Kaleniczenko 1851)<sup>25</sup> GB IRE  
*pseudoflavus* (Evans 1978)

Genus *Limax* Linnaeus 1758

*Limax cinereoniger* Wolf 1803 GB IRE

*Limax maximus* Linnaeus 1758 GB IRE

Genus *Malacolimax* Malm 1868

*Malacolimax tenellus* (O. F. Müller 1774) GB

FAMILY LYMNAEIDAE Rafinesque 1815

Genus *Galba* Schrank 1803

*Lymnaea* Lamarck 1799 partim

Subgenus *Galba* Schrank 1803

*Galba truncatula* (O. F. Müller 1774) GB IRE

Genus *Lymnaea* Lamarck 1799

Subgenus *Lymnaea* s.s.

*Lymnaea stagnalis* (Linnaeus 1758) GB IRE

Subgenus *Stagnicola* Jeffreys 1830<sup>26</sup>

*Lymnaea fuscus* (C. Pfeiffer 1821)<sup>27</sup> GB IRE

*palustris* (O. F. Müller 1774) auct. partim

*Lymnaea palustris* (O. F. Müller 1774) GB

Genus *Myxas* Sowerby 1822

*Myxas glutinosa* (O. F. Müller 1774) GB IRE

Genus *Omphiscola* Rafinesque 1819

*Lymnaea* Lamarck 1799 partim

*Omphiscola glabra* (O. F. Müller 1774) GB IRE

Genus *Radix* Montfort 1810

*Lymnaea* Lamarck 1799 partim

*Radix auricularia* (Linnaeus 1758) GB IRE

*Radix balthica* (Linnaeus 1758)<sup>28</sup> GB IRE

*peregra* (O. F. Müller 1774)

*ovata* (O. F. Müller 1774)

FAMILY MILACIDAE Ellis 1926

Genus *Milax* J. E. Gray 1855

*Milax gagates* (Draparnaud 1801) GB IRE

Genus *Tandonia* Lessona & Pollonera 1882

*Milax* J. E. Gray 1855 partim

*Tandonia budapestensis* (Hazay 1880) GB IRE

*Tandonia rustica* (Millet 1843) GB IRE

*Tandonia sowerbyi* (A. Férussac 1823) GB IRE

FAMILY ONCHIDIIDAE Rafinesque 1815

Genus *Onchidella* J. E. Gray 1850

*Onchidella celtica* (Cuvier 1817) GB

FAMILY OTINIDAE H. & A. Adams 1855

Genus *Otina* J. E. Gray 1847

*Otina ovata* (T. Brown 1827) GB IRE

FAMILY OXYCHILIDAE P. Hesse 1927 (1879)

Genus *Aegopinella* Lindholm 1927

*Aegopinella pura* (Alder 1830) GB IRE

*Aegopinella nitidula* (Draparnaud 1805) GB IRE

Genus *Nesovitrea* C. M. Cooke 1921

Subgenus *Perpolita* H. B. Baker 1928

*Nesovitrea hammonis* (Ström 1765) GB IRE

Genus *Oxychilus* Fitzinger 1833

Subgenus *Oxychilus* Fitzinger 1833

*Oxychilus alliarius* (J. S. Miller 1822)<sup>29</sup> GB IRE

*Oxychilus cellarius* (O. F. Müller 1774) GB IRE

*Oxychilus draparnaudi* (H. Beck 1837) GB IRE

*Oxychilus navarricus helveticus* (Blum 1881)<sup>30</sup> GB IRE

FAMILY PHYSIDAE Fitzinger 1833

Genus *Aplexa* Fleming 1820

*Aplexa hypnorum* (Linnaeus 1758) GB IRE

Genus *Physa* Draparnaud 1801

*Physa fontinalis* (Linnaeus 1758) GB IRE

Genus *Physella* Haldeman 1842<sup>31</sup>  
*Physa* Draparnaud auct.

*Physella acuta* (Draparnaud 1805)<sup>32</sup> GB IRE  
*heterostropha* (Say 1817)

*Physella gyrina* (Say 1821) GB IRE

FAMILY PLANORBIDAE Rafinesque 1815

Genus *Ancylus* O. F. Müller 1773

*Ancylus fluviatilis* O. F. Müller 1774 GB IRE

Genus *Anisus* S. Studer 1820

Subgenus *Anisus* S. Studer 1820

*Anisus leucostoma* (Millet 1813) GB IRE

*Anisus spirorbis* (Linnaeus 1758)<sup>33</sup> GB IRE

Subgenus *Disculifer* C. Boettger 1944

*Anisus vortex* (Linnaeus 1758) GB IRE

*Anisus vorticulus* (Troschel 1834) GB

Genus *Bathyomphalus* Charpentier 1837

*Bathyomphalus contortus* (Linnaeus 1758) GB IRE

Genus *Ferrissia* Walker 1903

Subgenus *Petancyclus* Iredale 1843

*Ferrissia wautieri* (Mirolli 1960)<sup>34</sup> GB

Genus *Gyraulus* Charpentier 1837

Subgenus *Armiger* W. Hartmann 1843

*Gyraulus crista* (Linnaeus 1758) GB IRE

Subgenus *Gyraulus* Charpentier 1837

*Gyraulus acronicus* (A. Férussac 1807) GB

*Gyraulus albus* (O. F. Müller 1774) GB IRE

Subgenus *Torquis* Dall 1905

*Gyraulus laevis* (Alder 1838) GB IRE

Genus *Hippeutis* Charpentier 1837

*Hippeutis complanatus* (Linnaeus 1758) GB IRE

Genus *Menetus* H. & A. Adams 1855

Subgenus *Dilatata* Clessin 1885

*Menetus dilatatus* (Gould 1841) GB

Genus *Planorbarius* Duméril 1806

*Planorbarius corneus corneus* (Linnaeus 1758) GB IRE

Genus *Planorbis* O. F. Müller 1773

*Planorbis planorbis* (Linnaeus 1758) GB IRE

*Planorbis carinatus* O. F. Müller 1774 GB IRE

Genus *Segmentina* Fleming 1818

*Segmentina nitida* (O. F. Müller 1774) GB

FAMILY PRISTILOMATIDAE T. Cockerell 1891

Genus *Vitrea* Fitzinger 1833

*Vitrea contracta* (Westerlund 1871) GB IRE

*Vitrea crystallina* (O. F. Müller 1774) GB IRE

*Vitrea subrimata* (Reinhardt 1871) GB

FAMILY PUNCTIDAE Morse 1864

Genus *Paralaoma* Iredale 1913

*Paralaoma servilis* (Shuttleworth 1852)<sup>35</sup> GB

*caputspinulae* (Reeve 1852)

*micropleuros* (Paget 1854)

*pusilla* R. T. Lowe 1831 non Vallot 1801

Genus *Punctum* Morse 1864

Subgenus *Punctum* Morse 1864

*Punctum pygmaeum* (Draparnaud 1801) GB IRE

FAMILY PUPILLIDAE Turton 1831

Genus *Pupilla* Fleming 1828

Subgenus *Pupilla* Fleming 1828



*Pupilla muscorum* (Linnaeus 1758)<sup>36</sup> GB IRE

FAMILY PYRAMIDULIDAE Kennard & Woodward 1914

Genus *Pyramidula* Fitzinger 1833

*Pyramidula pusilla* (Vallot 1801)<sup>37</sup> GB IRE  
*rupestris* (Draparnaud 1801) auct. partim

FAMILY SUCCINEIDAE H. Beck 1837

Genus *Oxyloma* Westerlund 1885

Subgenus *Oxyloma* Westerlund 1885

*Oxyloma elegans elegans* (Risso 1826)<sup>38</sup> GB IRE  
*pfeifferi* (Rossmässler 1835)

*Oxyloma sarsii* (Esmark 1886) GB IRE  
*elegans* auct. Brit. non (Risso 1826)  
*sarsi* auct.

Genus *Quickella* C. Boettger 1939

*Catinella* Odhner 1950 partim

*Quickella arenaria* (Potiez & Michaud 1835) GB IRE

Genus *Succinea* Draparnaud 1801

*Succinea putris* (Linnaeus 1758) GB IRE

Genus *Succinella* J. Mabille 1871

*Succinea* Draparnaud 1801 partim

*Succinella oblonga* (Draparnaud 1801) GB IRE

FAMILY TESTACELLIDAE J. E. Gray 1840

Genus *Testacella* Cuvier 1800

Subgenus *Testacella* Cuvier 1800

*Testacella haliotideae* Draparnaud 1801 GB IRE

*Testacella maugei* A. Férussac 1819 GB IRE

*Testacella scutulium* Sowerby 1820 GB IRE

FAMILY TRIGONOCHELAMIDAE P. Hesse 1832

Genus <i>Selenochlamys</i> O. Boettger 1883	
<i>Selenochlamys ysbryda</i> Rowson & Symondson 2008 <sup>39</sup>	GB
FAMILY VALLONIIDAE Morse 1864	
Genus <i>Acanthinula</i> H. Beck 1847	
<i>Acanthinula aculeata</i> (O. F. Müller 1774)	GB IRE
Genus <i>Spermodea</i> Westerlund 1903	
<i>Spermodea lamellata</i> (Jeffreys 1830)	GB IRE
Genus <i>Vallonia</i> Risso 1826	
<i>Vallonia costata</i> (O. F. Müller 1774)	GB IRE
<i>Vallonia</i> cf. <i>excentrica</i> Sterki 1893 <sup>40</sup>	GB IRE
<i>Vallonia pulchella</i> (O. F. Müller 1774)	GB IRE
FAMILY VERTIGINIDAE Fitzinger 1833	
Genus <i>Columella</i> Westerlund 1878	
<i>Columella aspera</i> Waldén 1966	GB IRE
<i>Columella edentula</i> (Draparnaud 1805)	GB IRE
Genus <i>Truncatellina</i> R. T. Lowe 1852	
<i>Truncatellina callicratis</i> (Scacchi 1833)	GB
<i>Truncatellina cylindrica</i> (A. Férussac 1807) <sup>41</sup>	GB
Genus <i>Vertigo</i> O. F. Müller 1773	
Subgenus <i>Vertigo</i> O. F. Müller 1773	
<i>Vertigo alpestris</i> Alder 1838	GB
<i>Vertigo antivertigo</i> (Draparnaud 1801)	GB IRE
<i>Vertigo genesii</i> (Gredler 1856)	GB
<i>Vertigo geyeri</i> Lindholm 1925	GB IRE
<i>Vertigo lilljeborgi</i> (Westerlund 1871)	GB IRE
<i>Vertigo modesta arctica</i> (Wallenberg 1858)	GB
<i>Vertigo moulinsiana</i> (Dupuy 1849)	GB IRE

<i>Vertigo pusilla</i> O. F. Müller 1774	GB IRE
<i>Vertigo pygmaea</i> (Draparnaud 1801)	GB IRE
<i>Vertigo substriata</i> (Jeffreys 1833)	GB IRE
Subgenus <i>Vertilla</i> Moquin-Tandon 1856	
<i>Vertigo angustior</i> Jeffreys 1830	GB IRE
FAMILY VITRINIDAE Fitzinger 1833	
Genus <i>Phenacolimax</i> Stabile 1859	
<i>Phenacolimax major</i> (A. Férussac 1807)	GB
Genus <i>Semilimax</i> Stabile 1859	
<i>Semilimax pyrenaicus</i> (A. Férussac 1821)	IRE
Genus <i>Vitrina</i> Draparnaud 1801	
<i>Vitrina pellucida</i> (O. F. Müller 1774)	GB IRE

## CLASS BIVALVIA LINNAEUS 1758

### ORDER UNIONOIDA STOLICZKA 1870

#### FAMILY MARGARITIFERIDAE Henderson 1929 (1910)

Genus *Margaritifera* Schumacher 1815

Subgenus *Margaritifera* Schumacher 1815

<i>Margaritifera margaritifera</i> (Linnaeus 1758)	GB IRE
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#### FAMILY UNIONIDAE Rafinesque 1820

Genus *Anodonta* Lamarck 1799

Subgenus *Anodonta* Lamarck 1799

*Anodonta anatina* (Linnaeus 1758) GB IRE

*Anodonta cygnea* (Linnaeus 1758) GB IRE

Genus *Pseudanodonta* Bourguignat 1877

*Pseudanodonta complanata* (Rossmässler 1835) GB

Genus *Unio* Philipsson 1788

Subgenus *Unio* Philipsson 1788

*Unio pictorum* (Linnaeus 1758) GB

*Unio tumidus* Retzius 1788 GB

## ORDER VENEROIDA H. & A. ADAMS 1856

FAMILY CORBICULIDAE J. E. Gray 1847

Genus *Corbicula* von Mühlfeld 1811

*Corbicula fluminea* (O. F. Müller 1774) GB

FAMILY DREISSENIDAE J. E. Gray 1840

Genus *Dreissena* Van Beneden 1835

Subgenus *Dreissena* Van Beneden 1835

*Dreissena polymorpha* (Pallas 1771) GB IRE

Genus *Mytilopsis* Conrad 1858

*Mytilopsis leucophaeta* (Conrad 1831) GB

FAMILY SPHAERIIDAE Deshayes 1855 (1820)<sup>42</sup>

Genus *Musculium* Link 1807

*Musculium lacustre* (O. F. Müller 1774) GB IRE

*Musculium transversum* (Say 1829) GB

Genus *Pisidium* C. Pfeiffer 1821

*Pisidium amnicum* (O. F. Müller 1774) GB IRE

<i>Pisidium casertanum</i> (Poli 1791)	GB IRE
<i>Pisidium conventus</i> Clessin 1877	GB IRE
<i>Pisidium henslowanum</i> (Sheppard 1823)	GB IRE
<i>Pisidium hibernicum</i> Westerlund 1894	GB IRE
<i>Pisidium lilljeborgii</i> Clessin 1886	GB IRE
<i>Pisidium milium</i> Held 1836	GB IRE
<i>Pisidium moitessierianum</i> Paladilhe 1866	GB IRE
<i>Pisidium nitidum</i> Jenyns 1832	GB IRE
<i>Pisidium obtusale</i> (Lamarck 1818)	GB IRE
<i>Pisidium personatum</i> Malm 1855	GB IRE
<i>Pisidium pseudosphaerium</i> J. Favre 1927	GB IRE
<i>Pisidium pulchellum</i> Jenyns 1832	GB IRE
<i>Pisidium subtruncatum</i> Malm 1855	GB IRE
<i>Pisidium supinum</i> A. Schmidt 1851	GB
<i>Pisidium tenuilineatum</i> Stelfox 1918	GB

Genus *Sphaerium* Scopoli 1777

<i>Sphaerium corneum</i> (Linnaeus 1758)	GB IRE
<i>Sphaerium nucleus</i> (S. Studer 1820) <sup>43</sup>	GB IRE
<i>Sphaerium rivicola</i> (Lamarck 1818)	GB
<i>Sphaerium solidum</i> (Normand 1844)	GB

## HOTHOUSE ALIENS

### CLASS GASTROPODA CUVIER 1795

#### ORDER NEOTAENIOGLOSSA HALLER 1892

#### FAMILY THIARIDAE Gill 1871 (1823)

Genus *Melanoides* Olivier 1804

*Melanoides tuberculatus* (O. F. Müller 1774) GB IRE

ORDER PULMONATA CUVIER IN BLAINVILLE 1814

FAMILY GASTRODONTIDAE Tryon 1866

Genus *Zonitoides* Lehmann 1862

Subgenus *Zonitoides* Lehmann 1862

*Zonitoides arboreus* (Say 1817) GB IRE

FAMILY HELICODISCIDAE H. B. BAKER 1927

Genus *Helicodiscus* Morse 1864

*Helicodiscus parallelus* (Say 1821) GB IRE

FAMILY LYMNAEIDAE Rafinesque 1815

Genus *Radix* Montfort 1810

*Radix rubiginosa* (Michelin 1831)<sup>44</sup> GB IRE

FAMILY PLANORBIDAE Rafinesque 1815

Genus *Gyraulus* Charpentier 1837

Subgenus *Gyraulus* Charpentier 1837

*Gyraulus chinensis* (Dunker 1848)<sup>45</sup> GB IRE

Genus *Planorbella* Haldeman 1843

*Planorbella duryi* (Wetherby 1879)<sup>46</sup> GB IRE

FAMILY PLEURODISCIDAE Wenz 1923

Genus *Pleurodiscus* Wenz 1919

*Pleurodiscus balmei* (Potiez & Michaud 1835) GB IRE

FAMILY PRISTILOMATIDAE T. Cockerell 1891

Genus *Hawaiia* Gude 1911

*Hawaiia minuscula* (Binney 1841) GB IRE

FAMILY STREPTAXIDAE J. E. Gray 1860

Genus *Gulella* L. Pfeiffer 1856

*Gulella io* Verdcourt 1974 GB

FAMILY SUBULINIDAE P. Fischer & Crosse 1877

Genus *Allopeas* H. B. Baker 1935

*Lamellaxis* Strebel & Pfeiffer 1882 partim

*Allopeas clavulinum* (Potiez & Michaud 1838) GB IRE

Genus *Opeas* Albers 1850

*Opeas hannense* (Rang 1831) GB IRE

*pumilum* (L. Pfeiffer 1840)

*hannensis* auct.

Genus *Rumina* Risso 1826

*Rumina decollata* (Linnaeus 1758)<sup>47</sup> GB

Genus *Striosubulina* Thiele 1933

*Subulina* H. Beck 1837 partim

*Striosubulina* sp.<sup>48</sup> GB

*striatella* auct. ?non (Rang 1831)

Genus *Subulina* H. Beck 1837

*Subulina octona* (Bruguière 1789) GB IRE

## EXCLUDED SPECIES

Some of the species listed for Britain or Ireland in Clecom have had to be excluded from the present list for the reasons given below.

### *Stagnicola corvus* (Gmelin 1791)

Despite its inclusion on the Clecom List for both Britain and Ireland and in the British list of Bank *et al.* (2007), there is no evidence that this species occurs in our area. See Note 26.

### *Monachoides incarnatus* (O. F. Müller 1774)

This species is listed for Ireland by Falkner *et al.* (2001). I have seen immature shells belonging to this species said to have been collected near Clonmacnoise, Co. Offaly (fide Gerhard Falkner). Visits to the site in 2002, and subsequently, have failed to provide firm evidence for this species' occurrence in Ireland (pers. comm. of E. Moorkens).

*Monachoides incarnatus* would not be expected in Ireland on biogeographical grounds as its range does not extend to either coastal north-west Europe or to Britain. It is excluded from the list until further evidence can be brought to bear.

### *Milax nigricans* (Philippi 1836)

In Britain and Ireland very dark coloured *Milax*, superficially similar to this species are occasionally encountered. I have dissected a number but so far all have proved to be *M. gagates* on the structure of the genital stimulator which is relatively smooth in *gagates* but moderately to strongly papillate in *nigricans*. Quick (1960) refers to the capture of a specimen of *M. nigricans* (det. H. Watson) from a garden at Bexhill, Sussex in 1948. There is no evidence for its establishment in this area and no subsequent reports from elsewhere, so it is excluded from the List.

### *Sphaerium ovale* (Férusac 1807)

See note 42.

### *Valvata macrostoma* Mörch 1864

Regarding the exclusion of this species from the Irish part of the List, there is a reference in Ross (1984) to specimens collected by William Thompson and labelled "Lough Neagh". These are housed in the Ulster Museum Collection. A.W. Stelfox and A.S. Kennard made the determinations so the identity of the collection is not in question but, as the determiners state, "locality doubtful". The Clecom List (Falkner *et al.* 2001) includes this species for Ireland based partly on specimens said to have been collected in the floodplain of the R. Shannon near Clonmacnoise. Thus far, it has not been possible to verify these claims but the survey team which collected them and the putative Irish *Perforatella rubiginosa* in the same area also worked in France where both species occur naturally (pers. comm. of G. Falkner) so the possibility of a simple confusion in labelling is raised.



## NOTES

**1 *Marstoniopsis insubrica*.** The name here is changed from the traditional usage, *M. scholtzi*, because of recent work by Falniowski & Wilke (2001). These authors compared *M. scholtzi* with a south alpine taxon, *M. insubrica*, and could find no significant morphological or genetic differences. The name *insubrica* must be substituted on date priority.

**2 *Hydrobia acuta neglecta*.** Until recently this was regarded as a north-west European endemic, *Hydrobia neglecta* Muus (e.g. Kerney 1999). Giusti *et al.* (1995) suggested that it was very closely related to the Mediterranean taxon *H. acuta* (Draparnaud 1805) and Hoeksema (1998) concluded that a Biscayan population was synonymous with *acuta*. In the Clecom List (Falkner *et al.* 2001) the specific epithet *neglecta* Muus was retained and the species placed in a separate Genus *Obrovia* Radoman 1973. Wilke *et al.* (2000), however, found only small genetic differences between study populations in the western Mediterranean and north-west Europe and concluded that both should be referred to *Hydrobia acuta*, with the north-west populations distinguished only at the subspecific level i.e. as *Hydrobia acuta s. neglecta*. The generic name *Obrovia* was erected for Balkan material collected by Radoman (1973, 1977). Its use for *neglecta* has been justified by Falkner *et al.* (2002) but has not been followed by Glöer (2002).

**3 *Mercuria cf. similis*.** The name for the British and Irish species of *Mercuria*, previously designated *M. confusa* (Frauenfeld 1863), is uncertain. The types of *confusa* have locality data, “*Gallia meridionalis*”, which indicate that they refer to a Mediterranean taxon. Indeed, Boeters & Falkner (2000) have used the locality designation and similarity of the types to material from southern France (Camargue) to justify the use of *confusa* lectotypes as neotypes of the Mediterranean species from that area, namely *M. similis* (Draparnaud 1805). This had hitherto lacked types. Falkner *et al.* (2002) further make a case for calling the N. European taxon *anatina* (Poiret 1801). Phylogenetic analysis of *Mercuria* is clearly desirable, as some authors (e.g. Giusti (1979)) suggest that there is only one variable species of *Mercuria* in the Mediterranean, rather than the large number of putative taxa recognized by others (e.g. Falkner *et al.* 2002). Indeed the N. European species may be conspecific with the Mediterranean *similis*, differences being at the subspecies level only, as is the case with populations of *Hydrobia acuta* in Europe.

A real difficulty with the position of Falkner *et al.* (2001, 2002) is that the type locality of *anatina* is uncertain and that the type is teratological. Nor is there any certainty that the Mediterranean and N. European populations are genetically distinct. It seems preferable to await the results of phylogenetic analysis and leave the name conditional, as *Mercuria cf. similis*.

**4 *Peringia ulvae*.** Wilke *et al.* (2000), and the Clecom List are followed here, in placing *ulvae* within *Peringia* Paladilhe.

**5 *Ventrosia ventrosa*.** The use of a separate genus to distinguish this species is contentious. Haase (1993) considered this to be unjustified on genetic distance criteria.

However, Wilke *et al.* (2000), in a phylogenetic study of *Hydrobia* s. l. in Europe, demonstrated the existence of three distinct clades in European *Hydrobia* s.l. represented by the genera: *Hydrobia* s.s., *Peringia* Paladilhe and *Ventrosia* Radoman. Their conclusions are accepted here.

The close relationship between N. American and European taxa of the *ventrosa* clade has been remarked by Wilke *et al.* (2003) although the relationship has not been tested at a molecular level.

**6 *Deroceras agreste*.** Added to the Irish List by Anderson (2006).

**7 *Arion rufus*.** Quick (1960) gives a detailed account of the red *Arion* found in Britain which he referred to *Arion rufus* (L.). Altena (1963) confirmed this designation as Linnaeus had cited drawings of Yorkshire specimens described by Lister (1685) and these were clearly identifiable with Quick's slug. Altena had pursued this issue as Odhner (1951) had inferred that Linnaeus' species was synonymous with *Arion subfuscus* (Drap.) The name to be applied to Quick's species in that case would have been *Arion empiricorum* A. Férussac 1819. What neither Altena (1963) nor Quick (1960) realised, was that *empiricorum*, rather than a synonym of *rufus* (L.), is in all likelihood a distinct species in its own right (pers. comm. of S. M. Davies). The descriptions of Continental 'rufus' by Chevallier (1981) should be compared with Quick's description of the Linnean species (1960). It appears that the Linnean taxon is confined to Britain, Ireland and Fennoscandia whereas a separate species occurs in continental areas of western Europe.

**7a *Arion vulgaris*.** The name *Arion lusitanicus* can no longer be applied to this taxon. A recent re-description of *lusitanicus* sensu Mabille, based on topotypes from Setúbal, Serra da Arrábida, Portugal (Castillejo 1997) has shown that Portuguese *lusitanicus* has a very different spermatophore and internal morphology from the central and west European species to which this name was applied, first by Altena (1956) and then by subsequent authors. Falkner *et al.* (2002) have proposed that the north-west European species be called *vulgaris* Moquin-Tandon 1855 as this is the first name which can be unambiguously applied. This argument is followed here.

British authors including Quick (1960) confused *vulgaris* with *Arion flagellus* Collinge. Some of Quick's drawings of 'lusitanicus' (= *vulgaris*), particularly of the spermatophore, actually relate to *flagellus*. The reader is directed to Davies' (1987) paper which first resolved the confusion here and gives a detailed account of the distinguishing features and reproductive biology of both species.

**8 *Arion fuscus/subfuscus*.** The name *Arion subfuscus* has been placed in synonymy with *Arion fuscus* by Falkner *et al.* (2001) for north European populations of this taxon. Draparnaud's species (*subfuscus*), with type locality in the Massif Central, was recently re-described by Garrido *et al.* (1995) from topotypic material and Falkner *et al.* (2001) claim that this is a southern species distinct from the common north European taxon. As a result the north European taxon requires a replacement name, now given as *A. fuscus* (Müller). However, Wiktor (1973) found great variability both internally and externally in Polish examples of *subfuscus* s.l., and has re-iterated recently that in Europe only one variable species is involved (Wiktor 2001).

Pinceel *et al.* (2004) have recently entered the fray using genetic analysis. Their results confirm that at least two distinct taxa, within *A. subfuscus* s.l., are present in north-west Europe. British Isles material was not examined directly by them but the results of Foltz *et al.* (1982) indicate that a form of *subfuscus* s.s. is present here. Most of the material collected by Pinceel *et al.* (2004) from the north-west seaboard of Europe (Scandinavia, north Holland, north Germany), however, is referable to the second species, *Arion fuscus*. This makes it highly probable that *A. fuscus* will occur at least in northern parts of the British Isles. Anderson (2005) reviewed alcohol vouchers from both Britain and Ireland and found the *A. subfuscus* morphotype, identified on the ovotestis characters of Pinceel *et al.* (2004), to be dominant. Only a single specimen was unambiguously attributed to the *A. fuscus* morphotype, collected on Knockmore Mountain, Clare Island, Co. Galway in October 2002.

Material examined since has also been predominantly referable to *A. subfuscus* s.s. However, one collection on a mountain slope at Cloontyprughlish, Glenade, Co. Leitrim, north-west Ireland, comprised a mixed group of *subfuscus* and *fuscus*.

**9 *Arion occultus*.** This species was recently described from Ireland (Anderson 2004). *Arion occultus* is almost certainly an introduction but the country of origin is unknown and it is recorded from only a small area in Co. Down. It is placed within the *Arion hortensis* group of *Kobeltia*, and seems closely allied to *Arion distinctus*.

**10 *Balea heydeni*.** Preece & Gittenberger (2003) introduced *Balea heydeni* as a valid species, distinct from *Balea perversa*, and occurring in the islands of the eastern Atlantic. This has now been formally introduced to the fauna of Britain and Ireland (Gittenberger *et al.* 2006).

**10a. *Papillifera bidens*.** Added to the list by Sharpe (2007) from Cliveden in Buckinghamshire where it has become established on stonework and statuary of a country house.

**11 Cochlicellidae.** The molecular data of Steinke *et al.* (2004) suggest that *Cochlicella* is rather distantly related to other genera in the Hygromiidae and is closer to the Sphincterochilidae. This coincides with the conclusions of Schileyko & Menkhorst (1997) using anatomical data. *Cochlicella* is therefore placed in a separate family, the Cochlicellidae.

**12 *Cochlicella barbara*.** Schileyko and Menkhorst (1997) have separated *barbara* (L.) from the other two *Cochlicella* on the structure of the penial papilla. Their preferred ordination is the erection of a new Genus *Prietocella*. However, Falkner *et al.* (2001) have introduced this name at the subgeneric level. Falkner *et al.* (2001) are followed here.

**13 *Cochlicopa lubrica/lubricella*.** The taxonomy of *Cochlicopa* in Europe is difficult and confused. Falkner *et al.* (2001, 2002) recognise four taxa: *C. lubrica*; *C. lubricella*; *C. repentina*; *C. nitens*. Armbruster (2002) mentions a fifth, *C. lohmanderi* Waldén 2001 from Sweden. *Cochlicopa lubrica*, *C. lubricella* and *C. repentina* are listed as British by Falkner *et al.* (2001). The inclusion of *C. repentina* is controversial and this species has not been recognized by British and Irish authors other than Moorkens & Speight (2001). The distinguishing features are primarily conchological (Waldén 1976), and analysis by

Armbruster (2002) has indicated that *repentina* is synonymous with *C. lubrica*.

The reliable distinction of *C. lubrica* and *C. lubricella* in the field is also uncertain, as phylogenetic analysis (Armbruster 1997) has indicated that *lubrica* exists as two distinct ecotypes, one found in damp habitats, the other in dry, exposed places and that *lubricella* comprises two small-shelled paraphyletic taxa, distinguishable only on genetic characters. One of the *lubricella* taxa closely approaches *C. lubrica* and may be synonymous. It is likely that both *C. lubrica* and *C. lubricella* occur in Britain and Ireland, but the usual distinguishing features, shell size and habitat preference, are probably unreliable. For these reasons the species are listed as *Cochlicopa* cf. *lubrica* and *C. cf. lubricella* in recognition of the unreliable nature of the relationship between shell morphology and the biological species and the fact that British material has not been compared directly with topotypic Continental material to which these names apply.

**14 *Myosotella*.** *Ovatella* is now split into two genera, *Ovatella* s.s. and *Myosotella* (Martens 1999). *Ovatella* s.s. is not represented in north-west Europe.

**15 *Myosotella denticulata*.** *Myosotella denticulata* is recognized in the Clecom List as distinct from *M. myosotis* and as occurring in our area. An ecological distinction from *myosotis* is claimed, with *M. denticulata* occupying more fully marine environments. What appear to be intermediates between the two do occur, however, and the author has seen such on the west coast of Ireland. Despite this, *denticulata* was included in the 2005 List.

A number of collections of putative *denticulata* and *myosotis*, taken both from exposed coasts and estuaries since 2005, have been examined. Provided that the sample is adequate (> 6specimens) it is usually possible to quickly assign to species. The ecological preferences are also consistent i.e. *myosotis* on sheltered or semisalinity habitats, *denticulata* on exposed coasts. It appears that mature *denticulata* may lack obvious palatal denticles and could be mistakenly allocated to *myosotis* (see remarks above). Juveniles of *denticulata* invariably possess more than one palatal denticle, a feature which distinguishes this species from *myosotis* (Glöer 2002). At maturity the juvenile denticles may be submerged by accretion of limy material on the outer lip and can become completely covered or form small bumps which are difficult to see. The majority of mature specimens possess the requisite number of palatal teeth i.e. >2 in the case of *denticulata*, <2 in the case of *myosotis*. It is therefore important not to base identification on single specimens and a good sample should be taken, including juveniles.

**16 *Merdigera obscura*.** This was formerly included within *Ena*, chiefly on shell characters. A re-evaluation of its affinities (Schileyko 1978) has concluded that it is not very closely related to the other British species, *Ena montana* (tribe *Enini*), and is now placed in *Merdigera* within a different tribe, the *Multidentulini*.

**17 *Euconulus* cf. *fulvus/alderi*.** Falkner *et al.* (2001), in what they describe as the preliminary phase of a revision of European *Euconulus* (Falkner *et al.* 2002), list three taxa for Britain and Ireland: *E. fulvus*; *E. trochiformis* (Montagu 1803); and *E. praticola* (Reinhardt 1883). *Euconulus trochiformis* is claimed as a senior synonym of *E. alderi* and therefore replaces that name, and *E. praticola* represents a third taxon distinguished

from the others on large shell size, dark shell colour, and very dark animal with a stenotopic habit, being confined mainly to wetlands.

There are several problems with these proposals in respect of the fauna of Britain and Ireland. The current ordination for the British Isles fauna i.e. using *E. fulvus* and *E. alderi*, has a lot of data attached. Two forms are generally recognisable in the field i.e. a relatively large, dull form with pale animal occurring in shaded habitats (*E. fulvus*), and a smaller, more glossy form with darker animal (though varying in body colour) in open, wet habitats (*E. cf. alderi*). It is difficult to see where the third taxon, *praticola*, fits in. A small, pale-bodied form is occasional in wetland biotopes but does not fit into Falkner's ordination, whereas there is little evidence for a larger, dark animal (*praticola*) such as he describes. The full details of the proposed revision of *Euconulus* are unavailable so I regard it as premature to accept an orthodoxy lacking published justification. In order to bridge the divide between the Clecom view and the view of field recorders in Britain I have chosen to retain the familiar names but apply a conditional stance i.e. cf. *fulvus* and cf. *alderi*.

**18 *Cornu aspersum*.** The generic name for the common garden snail has been a source of controversy for some time. At least three alternatives are circulating in the literature, including *Cantareus* Risso and *Cryptomphalus* Charpentier, which are now generally applied to species in different helicid clades from *aspersum*. The name *Cornu* Born has been applied by Falkner *et al.* (2001), although the type is a scalariform (teratological) specimen. This makes *Cornu* unavailable according to ICZN Article 1B(2) (1985) but it has been argued that its validity is unaffected because it was described or designated in Born's protologue as teratological. Waldén (1976) appeared to accept this or a similar argument in an earlier list for Britain and Ireland, in placing the garden snail in *Helix* Subgenus *Cornu*.

**19 *Lucilla singleyana*.** This taxon, listed by Kerney (1999) as *Helicodiscus singleyanus*, was placed in Subgenus *Hebetodiscus* by Pilsbry (1948). Falkner *et al.* (2002) make a case for regarding *Hebetodiscus* as distinct at the generic level from *Helicodiscus*. However, since *Lucilla* Lowe 1852, has date priority over *Hebetodiscus* Baker 1929, the generic name should be *Lucilla*, and the species name *singleyana*.

**20 *Cernuella aginnica*.** Added to the British List by Carr (2002) from near Maidstone in Kent.

**21 *Trochulus*.** A recent ICZN ruling, Opinion 2079 (2004), has resulted in the replacement of the name *Trichia* Hartmann 1840 for the hairy snail and related species, to remove homonymy with *Trichia* de Haan 1839 (Crustacea, Brachyura) relating to marine crabs. The replacement name is *Trochulus* Chemnitz 1786. This is accordingly adopted.

**22 *Trochulus sericeus*.** As Falkner *et al.* (2002) point out, the name *plebeius* has been wrongly applied to the taxon listed above as *Trochulus sericeus* (Draparnaud). Forcart (1965) originally proposed the replacement of the name *sericeus* by the younger name *plebeius* to sort out a difficult taxonomic problem relating to the validity of the name *sericeus* (Draparnaud 1801) in contradistinction to *sericeus* (Müller 1774). However, in so doing, he synonymised what have subsequently been regarded as two distinct species, one widespread in north-west Europe, the other confined to the alpine region. This error

has insinuated itself into most recent British and European lists and, although the taxonomic difficulties involved in the use of the name *sericeus* (Draparnaud) are not yet resolved, the eventual validation of this name for the British species seems a likely outcome.

On the other hand, Naggs (1985) has exhaustively examined morphological variation of *sericeus* (=plebeius) in Britain and could find no consistent or distinctive differences from the very common *Trochulus hispidus*. Prockow (2000) likewise, could find no consistent diagnostic internal or external characters separating the two in Europe. The narrowly de-limited distribution of *sericeus* in Britain does, however, argue for some characteristic which recorders can recognise in a consistent way. Naggs (pers. comm.), has now uncovered a consistent internal difference between the two. The spermatheca (gametolytic sac) of *sericeus* is consistently spherical (as long as broad) whereas that of other British *Trochulus* is consistently longer than broad i.e. ovate. The extent of overlap appears to be very small. This distinction applies also to populations of *sericeus* from central France. *Trochulus sericeus* is retained in the current List.

**23 *Zenobiella subrufescens*.** Kerney (1999) placed this species in *Perforatella* following current European practice, but Falkner *et al.* (2001) subsequently elevated Subgenus *Zenobiella* of *Perforatella* to generic status. So the species is once again *Zenobiella subrufescens* as in earlier British Lists (Waldén 1976, Kerney 1976b).

**24 *Lehmannia nyctelia*.** Quick (1960) reported this species from an indoor heated environment in Edinburgh but it has recently been found naturalized in a garden at Crediton, Devon (pers. comm. of S. M. Davies). It is difficult if not impossible to reliably distinguish from *L. valentiana* on external characters and differs mainly in the longer penis and by the lack of a flagellum. Waldén (1976) thought that its internal characters were intermediate between *Lehmannia* and *Malacolimax* and that these subgenera were poorly differentiated. However, other *Lehmannia* such as *L. szigethyae* Wiktor also lack a flagellum and there are other good characters such as folding of the internal wall of the penis, separating *Lehmannia* and *Malacolimax*. The genitalia of *L. nyctelia* are figured by Quick (1960).

**25 *Limacus maculatus*.** The phylogeny of this species is contentious. Forcart (1986) and Wiktor (2001) place it either in Genus *Limacus* or in *Limax* Subgenus *Limacus*. A contrary view is taken by Giusti (1973) and by Giusti *et al.* (1995) who place *maculatus* outwith *Limacus* and in *Limax* sensu stricto. The argument, though not heretofore expressed in such terms, is essentially about whether similar character states in *maculatus* are synapomorphic to those of *flavus* i.e. derived recently from common descent. It is certainly difficult to envisage such divergent features as egg shape, body colour, watery nature of the body mucus and integument and possession of a long caecum in the intestine, which these species share, as other than strong evidence for a close relationship i.e. synapomorphy. The peculiar placement of the spermathecal canal in *L. flavus* i.e. located in the wall of the penis rather than in the wall of the oviduct (as in *maculatus*), is often regarded as plesiomorphic i.e. indicating independent descent and a more distant relationship. However, this must be balanced against the much greater number of shared, potentially apomorphic, characters. While the penial conjunction of the spermatheca can be seen as a primitive character found otherwise only in a few Ponto-Caspian limacids, it

may also be viewed as part and parcel of a more general variability in placement and size of organs within the reproductive system in *Limax* and allied genera. What then of the erection of a separate genus (*Limacus*) to accommodate *maculatus* and *flavus*? This can still be justified on the character states common to both and listed above, which also indicate that *Limacus* occupies a position intermediate between *Limax* sensu stricto and *Lehmannia*.

**26 *Lymnaea (Stagnicola) palustris* agg.** In a phylogenetic analysis of the European Lymnaeidae BARGUES *et al.* (2001) judged the genetic distance between species in *Stagnicola* and *Lymnaea* sensu stricto to be too small to justify separation at the generic level, thereby placing *Stagnicola* as a subgenus of *Lymnaea*, rather than as a separate genus. More recent evaluation of the status of stagnicoline systematics in Europe (BARGUES & MAS-COMA 2005, BARGUES *et al.* 2006) confirm this conclusion.

**27 *Lymnaea fuscus*.** Carr & Killeen (2003) introduced this species to the British list. It appears to be by far the commonest segregate of *Lymnaea palustris* agg. in Britain and Ireland. *Lymnaea palustris* seg., on the other hand, appears to be rare with only a small scatter of records for eastern Britain, not having been found in Ireland. Claims that a third segregate *Lymnaea corvus* (Gmelin) occurs in Britain and Ireland (Falkner *et al.* 2001) must be treated with caution as the determinations appear to have been made on conchological characters. A large sample of both British and Irish material has been dissected by Carr & Killeen (2003) and only *L. palustris* and *L. fuscus* verified so far. Falkner *et al.* (2001) do not record *L. fuscus*, the commonest species, for the Britannic area.

Anderson (2005) used the name *Lymnaea (Stagnicola) fusca* for the commonest segregate species of the *palustris* group in Britain and Ireland. This is grammatically incorrect. The amended entry is *Lymnaea (Stagnicola) fuscus*, as above.

**28 *Radix balthica*.** The complex synonymy of this species is discussed by the authors of the Clecom List (Falkner *et al.* 2001; Falkner *et al.* 2002). Historically, European authors have claimed that there are two closely allied species in northern Europe, a high-spined form identified (by them) as *Radix peregra* (Müller) and a very common low-spined form called *R. ovata* (Müller). Recent phylogenetic research (BARGUES *et al.* 2001) has demonstrated, that there are indeed two closely related but distinct *Radix* in central Europe, but only one in northern Europe. The higher spined of these taxa is not the common, moderately high-spined N. European morphotype but a much rarer central or alpine species. It appears that this is absent from northern Europe including Müller's type locality for *peregra* in Denmark. The alpine taxon should be called *R. labiata* (Rossmässler). This leaves the much more widespread and common species, still with two forms (and two names), to be dealt with. The higher-spined morphotype (not as high spined as *labiata*) is traditionally called *R. peregra* (Müller) and the low-spined morphotype, *R. ovata* (Müller).

These two forms have achieved recognition partly through the misunderstanding outlined above, but mostly due to a difference in ecology. In effect, they are ecotypic. The low-spined form is common in slow or still waters and the higher-spined form in running

waters. Since only one variable species is now recognized, Müller's names are synonyms. So far so good. Unfortunately, the name *ovata* is also now a synonym of an earlier Linnean name, *R. balthica* (L.) (Linnaeus designated what was subsequently perceived as a 'mixed' collection of high and low-spired forms for this name, but the acceptance of a single unifying taxon now releases the name). Therefore, three names are available. The name *balthica* has priority over Müller's two names on date of publication and is used by Falkner *et al.* (2001, 2002). However, *peregra* (Müller) is listed as a conserved name under ICZN Opinion 336, so *balthica* should revert to the status of a synonym.

Falkner *et al.* (2002) argue against this on the basis that it will clarify the identity of the northern species if it is re-named, distinguishing it from historically confused designations such as that of Hubendick (1951) which had a very broad compass and included species now considered distinct from *peregra* such as *ampla* (Hartmann) and *labiata*. This argument is accepted here.

**29 *Oxychilus*, *Ortizius*.** *Oxychilus alliarius* and *O. navarricus* are placed in Subgenus *Ortizius* Forcart, 1957 in the Clecom List. Giusti & Manganelli (1999, 2002) argue against this ordination and place *Ortizius* in synonymy with Subgenus *Oxychilus* s.s. *Ortizius* according to Giusti & Manganelli (1999, 2002) is not a natural group and members cannot be distinguished reliably from the members of Subgenus *Oxychilus*. Species in Subgenus *Oxychilus* possess, in common with those listed for *Ortizius*: penis with a flagellum; penial retractor inserted at the apex of the flagellum; penis ornamented internally with pleats; long epiphallus; epiphallus internally with slender longitudinal pleats; mucus gland mainly vaginal; central teeth on the radula with long mesocones. The synonymy of Giusti & Manganelli (1999) is followed here.

**30 *Oxychilus navarricus helveticus*.** Falkner *et al.* (2001) have postulated that *Oxychilus helveticus* is conspecific with a Pyrenean taxon, *Oxychilus navarricus* (Bourguignat 1870). The latter name has priority on date of publication, but because these are regarded as two geographical races of the same species, the northern one, originating from the alpine region and widespread in the British Isles, should be called *navarricus helveticus* (Blum).

**31 *Physella*, *Haitia*.** Taylor (1988, 2003) has transferred *Physella acuta* to the Genus *Haitia* Clench & Aguayo, this being the earliest available name (other than *Costatella* Dall), in a revision which involved, among other things, elevating former subgenera to genera within the North American Physidae. *Haitia* (which Taylor used in an earlier paper, Taylor (1988)) was validated by him following the erection of a separate genus for the type species of *Costatella costata* Newcomb, which took *Costatella* out of contention as the earliest valid name for the *acuta* clade. These changes rest upon a raft of assumptions about the validity of the new taxonomic units which are difficult to test without relevant phylogenetic or breeding studies. The use of *Haitia* is not followed here.

Remigio *et al.* (2001), in an examination of the evolutionary origins of *Physella* (*Physella*) *gyrina* and of two localised spring species *Physella* (*Physella*) *wrighti* Te & Clarke and *Physella* (*Costatella*) *johnsoni* (Clench), have come to interesting conclusions about the ordination of N. American Physidae. They concluded that *wrighti* is the ancestral form from which *gyrina* and *johnsoni* arose 10,000 years ago, after the last



major glaciation. DNA analysis established that *gyrina* and *johnsoni* are very closely related (0.0 to 0.4% distance at 16S ribosomal RNA) despite being classified in different subgenera i.e. in *Physella* and *Costatella* respectively. They are in fact about as related as *gyrina* and *wrighti* to each other even though the latter are in the same nominal clade. The authors conclude that genetic distance, calculated from the DNA analysis, is insufficient to justify subgeneric partition for these species. This does not sit well with the revision being proposed by Taylor (2003).

In the circumstances it seems wiser to retain *Physella* for both the *gyrina* and *acuta* clades until some of the issues raised by these findings can be further investigated. As an aside, comparison of a species of *Physa* with the above *Physella* species by Remigio *et al.* (2001) indicated a much more ancient divergence, justifying the widely accepted generic separation of *Physa* from *Physella*.

**32 *Physella acuta*.** The taxonomic status of the putative British species *Physella acuta* and *Physella heterostropha* are discussed by Anderson (2003). *Physella heterostropha* is reduced to synonymy with *P. acuta* on the basis both of morphological homogeneity (Anderson 2003) and lack of breeding isolation in experiments conducted on N. American samples of the morphotypes (Dillon *et al.* 2002).

Note: There may well be other N. American species naturalised in Europe but this will require further study. The name *heterostropha* in the meantime is not available for these taxa.

**33 *Anisus leucostoma/spirorbis*.** Falkner *et al.* (2001) list two species of *Anisus* subgenus *Anisus* for the British Isles i.e. *spirorbis* (L.) and *leucostoma* (Millet) representing broad-whorled and narrow-whorled morphotypes respectively.

The separation of *Anisus spirorbis* from *A. leucostoma* continues to be problematical. Glöer (2002) remarks that a population studied by Wawrczinek at St Georges-du-Bois varied in conchological characters, and therefore species assignment, between years and that some specimens possessed internal characters intermediate between the two putative taxa. Reliable evidence of specific distinction for the broad-whorled form *spirorbis* is difficult to find. This issue will undoubtedly be examined phylogenetically at some future point, but in the meantime two species are retained.

**34 *Ferrissia wautieri*.** The name to be applied to this taxon is contentious. In the Clecom List it is considered synonymous with *F. clessiniana* (Jickeli 1882), which was described from Alexandria in Egypt. Falkner *et al.* (2002) regard it as distinct from related N. American species as well as native to Europe. Glöer (2002) retains the name *F. wautieri* on the basis that its identity and internal morphology are well established whereas some of the alternative contenders are poorly characterized. Glöer (2002) is followed here. *Ferrissia* was first recorded in Britain from a pond at Bishop's Waltham in Hampshire and from indoor aquaria (Brown 1977) the latter occurrence suggesting a potential mechanism for its introduction and spread. A North American origin seems likely, notwithstanding the contentions of Falkner *et al.* (2001, 2002). A putative relationship with species in the N. American fauna should be explored further.

**35 *Paralaoma servilis*.** The present species has had a long and complex taxonomic

history which Falkner *et al.* (2002) have ingeniously disentangled. The correct name for the small shell called *Paralaoma caputspinulae* by Kerney (1999) is *P. servilis*.

**36 *Pupilla bigranata*.** *Pupilla bigranata* is listed for Britain by Falkner *et al.* (2001). Barry Colville (pers. comm.) has commented on British populations containing individuals with *bigranata*-like shells. Where specimens with *bigranata*-like shells are present, normal *muscorum* also occur and specimens with characters intermediate between the typical forms are invariably present also. Communities with *bigranata*-like individuals appear scarce in Britain and have not been recorded in Ireland. This name is omitted from the List for lack of evidence of the occurrence of a distinct biological species.

**37 *Pyramidula pusilla*.** *Pyramidula rupestris* s. l. comprises a range of morphotypes in Europe. The review of Gittenberger & Bank (1996) has reversed an early (19th century) lumping of taxa in European *Pyramidula* and recognises several species and subspecies. The common European species under this scheme is *P. pusilla* (= *rupestris* auct. non Draparnaud 1801) of which the British and Irish form has been designated as subspecies, or possibly even species, *umbilicata* (Montagu). As yet, apart from controversial conclusions based on shell morphology in this review, little justification has been provided for the subspecific or specific distinction of the British form. On biogeographical grounds a distinct subspecies is possible but unlikely and a distinct species rather less likely than that. A more conservative view is taken here with the British species aligned with the common north-west European form *pusilla* (Vallot) until further evidence becomes available.

**38 *Oxyloma elegans/sarsii*.** There has been a consistent difference in usage of the name *elegans* between British and Scandinavian authors on the one hand (Waldén 1976), and most Continental authors on the other. The latter have used this name for the most widespread of the European species of *Oxyloma* and the former for a different, much rarer, northern taxon. Falkner *et al.* (2002) have re-examined the types of *elegans* in MHNM and compared these with topotypes from Risso's locus typicus in the Camargue. This study has confirmed earlier European studies which identified Risso's *elegans* as the common European species. Accordingly, the name *pfeifferi* of British authors becomes a junior synonym of *elegans*, and *sarsii* is applied to the northern taxon previously called *elegans* by British and Scandinavian authors.

Note that Anderson (2005) adopted a common misspelling *Oxyloma sarsi*, instead of the (correct) form *O. sarsii*.

**39 *Selenochlamys ysbryda*.** Following the discovery of pale, *Testacella*-like slug in disturbed soils in south Wales, *Selenochlamys ysbryda* was described new to science (Rowson & Symondson 2008) and is added to the list. It probably originated from the Caucasus where the only other recognised member of the genus occurs.

**40 *Vallonia* cf. *excentrica*.** A recent phylogenetic analysis by Korte & Armbruster (2003) indicates that *V. excentrica* comprises two paraphyletic taxa which are difficult or impossible to distinguish on shell morphology. The situation is therefore similar to that applying to *Cochlicopa lubricella* (see Note 13). As it is impossible to identify which of the paraphyletic taxa occur in Britain and Ireland, the *excentrica* complex is indicated in

the list as *Vallonia* cf. *excentrica* pending further investigations. In addition Korte & Armbruster (2003) found that *Vallonia pulchella* is closely allied to, and may be synonymous with, *Vallonia enniensis*. However, this does not affect use of the name *pulchella* for British material.

**41 *Truncatellina cylindrica*.** This species is included by Ross (1984) in an Irish List but inclusion rests upon a single shell collected by William Thompson at Groomsport, Co. Down in the mid 19th-century and discovered recently in Thompson's collection. As it is difficult to be sure of the age of the Groomsport specimen, and the site appears to have been unsuitable for this species during the modern era, a decision has been taken to remove it from the Irish part of the present List. Although subfossil shells are present in Quaternary dune deposits in north Antrim/Londonderry (Welch 1898) there is no indication that the species survived in Ireland into modern times.

**42 Sphaeriidae subgenera.** Killeen *et al.* (2004) are followed here, in that subgenera and subspecies are not recognized in the Sphaeriidae.

**43 *Sphaerium nucleus*.** Added to the List by Killeen *et al.* (2004) and so far known from three areas of grazing marsh in south-east England. It is since reported from two sites on the Royal Canal, Co. Longford, Ireland (Moorkens 2005). The Clecom List records *Sphaerium ovale* (Férussac 1807) for Britain and Ireland but Killeen *et al.* (2004) note that there are no authenticated field records and that further work is needed to confirm its occurrence. It is excluded from the present list for the time being.

**44 *Radix rubiginosa*.** This small lymnaeid has been observed on several occasions in tropical aquaria in Ireland and there is a colony of what appears to be this species in the Victoria House at Kew Gardens, Richmond, Surrey (R. Anderson, unpublished observations). It is distinguished from related tropical lymnaeids by the heavily pigmented and spotted praeputium, by the strong development of the dual bundles of musculature inside the praeputium, by the way in which these taper proximally in the sarcobellum, and by the long (equal or subequal in length to the praeputium) and slender, penis and penis sheath (Hubendick 1951). The prostate has a single fold. The shell is similar in shape to another widespread Asiatic species *R. luteola* (Lamarck 1822), but the sutures are much deeper and the shell is pale to deep horn colour, lacking the brown apex and striping often seen in *luteola*. *Radix rubiginosa* has been reported from heated aquaria in Israel (Mienis 1986). Its native range is Indo-China and Indonesia (Hubendick 1951) where it can be an important vector for helminthic parasites.

**45 *Gyraulus chinensis*.** *Gyraulus chinensis* is native to east Asia and is another common species of tropical aquaria (R. Anderson unpublished; McMillan 1998). It is naturalised in west and south Africa (Appleton 1996) and in rice fields of southern Spain, from whence it is distributed sporadically northwards, mainly in artificially heated environments, to Germany (Brown *et al.* 1999).

**46 *Planorbella duryi*.** This is the common ramshorn found in the tropical aquarium trade (R. Anderson unpublished). Fairly ubiquitous in aquaria and occasionally in greenhouses. There has been some confusion about the name to be applied but Horsák *et al.* (2004) conclude that in Austria and the Czech Republic at least, the aquarium species is *P. duryi*. Material collected from aquaria in Northern Ireland has been dissected and also

corresponds to *P. duryi*. The occurrence of other species, notably *Planorbella trivolvis* (Say 1817), cannot be ruled out.

**47 *Rumina decollata*.** This has been reported by Seddon & Pickard (2005) from Caerphilly Garden Centre, South Wales, new to the British Isles. Bank *et al.* (2007), however, indicate two older records for Britain: greenhouses at Watton, Devon (Turton 1826) and Kew, Surrey (Kew 1893).

**48 *Striosubulina* sp.** Schileyko (1999) has revised the status of this species (formerly in *Subulina*) making it the type of a segregate Genus *Striosubulina*. His justification is based upon a re-description of '*Subulina striatella*' using material collected in Kew Gardens. It has been noted (pers. comm. of F. Naggs) that Rang's original description of *S. striatella* (Rang 1831) contains a colour figure showing a dark animal. The Kew species has a pale yellow body. Some doubt therefore pertains to the name to be applied here.

## DISCUSSION

The List presented here is intended to provide a way forward for the recording community within the Conchological Society at a time of unprecedented change in the taxonomy and nomenclature of molluscs.

One objective has been to ascertain the number of taxa currently recorded from Britain and Ireland and to assign names on the best evidence available. For a number of taxa this has been a particularly difficult task because of competing opinions and the complexity of the issues involved. Decisions have been made, as far as possible, using phylogenetic criteria where research evidence is available. Historically, a great many decisions have been based largely or entirely on conchological criteria which is unwise, as in many groups conchological characters are governed by environmental as well as genetic factors. There are several examples in the List for which phylogenetic analysis would be desirable to resolve long-standing difficulties of interpretation. Use of the structure of soft parts including the male genitalia can also be misinterpreted in deciding relatedness. Overall, a balance has been sought between external and internal morphology, though in the end giving precedence to molecular studies.

This List, as with all lists, is not the last word on the subject and will undoubtedly require to be modified as further research evidence becomes available on the outstanding issues.

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