# List of the Mollusca of the Cleveland District

(This is an updated version of an article which first appeared in the spring 1999 issue of the Cleveland Naturalists' Field Club Record of Proceedings.
Updated to 31 December 2012)

At the close of the 19th century, an article with the above title appeared in the Cleveland Naturalists' Field Club Record of Proceedings, written by the Reverend John Hawell, vicar of Ingleby Greenhow (Hawell 1899). After an interval of a hundred years it seemed fitting to attempt a reassessment of the status and distribution of molluscs in Cleveland in order to summarise current knowledge at the end of another century and to compare this with the information provided by Hawell and other 19th century malacologists.

John Hawell served as both President of the Field Club and Editor of the Proceedings (Cowley-Fowler 1905), his writing indicating that he had a clear and enthusiastic vision of the role which both of these had to play. Of the Field Club, he wrote, "an important part of [its] work may well be to work out the Natural History of the …district and to record in some permanent form the observations regarding its fauna and flora… These records will have great value, and in making a study of them we shall find that some organisms have become, in the process of time, extinct within the district, and shall learn valuable lessons in our endeavour to trace the causes which have ministered to their extinction. We may also be able to note, as time goes on, the gradual extinction of other species, and the introduction and spread of new organisms. The interest attaching to the permanent record of observations by the Field Club will increase rather than diminish as years go on, and that record becomes more complete." Arguably these sentiments are just as relevant today

as they were in 1899.
In addition, Hawell produced a clear, historically based definition of Cleveland. This does not coincide with the short-lived administrative county which existed from 1974 to 1996 but is based on a series of parishes as they existed in Hawell's time. "It includes the following 33 old parishes: Acklam (including the three townships of Acklam, Linthorpe and Middlesbrough), Appleton, Arncliffe, Ayton, Carlton, Crathorne, Danby, Easington, Egton, Faceby, Guisborough, Hilton, Hinderwell, Ingleby, Kildale, Kirby, Kirkleatham, Kirklevington, Loftus, Lythe, Marske, Marton, Newton, Ormesby, Rudby, Seamer, Skelton, Stainton, Stokesley, Upleatham, Whorlton, Wilton, Yarm" (Hawell 1895).
In the present article, Hawell's definition of Cleveland is adopted. However, to set the data in a more useful context, some comments on the status and distribution of species in other parts of vice-county 62 and in the rest of Yorkshire and county Durham, have been included.
Hawell was not alone in his interest in the Mollusca of Cleveland in the 19th century, nor was he the first. Watson (1854) produced an account of the land snails of Airy Holme Wood near Great Ayton, of particular value because this area suffered extensive damage due to mineral extraction shortly afterwards (Ashford 1879). Subsequently, Watson was co-author of a small text entitled 'A Descriptive Manual of British Land and Freshwater Shells' (Dixon & Watson 1858) which contains a few records for the Cleveland area. Another book containing records of molluscs is that of Ferguson (1860) on the natural history of the Redcar district. Other malacologists of the period who published records for Cleveland include Charles Ashford (1879) and Baker Hudson (1884, 1886a, 1886b, 1887, 1889). In addition, excursions were made to the Cleveland area by the Yorkshire Naturalists' Union (YNU) in the period leading up to Hawell's publication of 1899. Published records of molluscs found on these visits include those for Skelton Beck valley (anon. 1887) and Kildale (Roebuck 1890). The shell collections of John Hawell and Baker Hudson are stored currently at the Dorman Museum in Middlesbrough and these provide useful information on the status and distribution of molluscs in the Cleveland area in the 19th century. At the turn of the century many records for the Cleveland area were summarised in the now classic but unfinished 'Monograph of the Land and Freshwater Mollusca of the British Isles' (Taylor 1894-1921).
In the time following Hawell's publication occasional visits by the YNU to the Cleveland area have continued right up to the present and relevant publications are referred to in the species summaries below. During the period 1925-8 Bernard Lucas, a member of the Darlington and Teesdale Naturalists' Field Club, made an extensive collection of land and freshwater shells, principally from the Darlington and Cleveland areas. More recently, visits by the Yorkshire Conchological Society have taken place to Mulgrave Woods in 1971, Coatham Marsh, Airy Holme Wood and Kildale in 1972 and Kilton Woods in 1990. Airy Holme Wood and Mill Bank Wood in Kildale were revisited in 2004.
From 1982, an attempt has been made to compile comprehensive lists of terrestrial mollusc species for a number of woodlands in the area (Wardhaugh 1996, 1997) with records made during some CNFC excursions appearing in the Record of Proceedings since 1993. Consequently, the following account deals with land snails and slugs only and there remains the opportunity for much work on the current status and distribution of freshwater and marine molluscs in the area, which were covered in Hawell's paper of 1899.
North-east Yorkshire has a rich and varied terrestrial molluscan fauna with some species present at the southern limit of their range e.g. *Spermodea lamellata*, and others at their northernmost e.g. *Pomatias elegans* and *Oxychilus navarricus helveticus* (Kerney 1999). Of about 130 British species, Kerney and Cameron (1979) list 29 as declining nationally, at least twelve of these having been recorded in Cleveland at some time. Reasons for these changes are not obvious but habitat loss and atmospheric pollution may well have been significant causes. Norris (1998) produced a Red Data list for Yorkshire land and freshwater Mollusca. To an extent, changes in the status and distribution of terrestrial molluscs in Cleveland are difficult to assess owing to the paucity of historic data. Undoubtedly, some species have lost ground, e.g. *Helicella itala* which once occurred on Coatham sand dunes (Ferguson 1860) and where it is almost certainly no longer present. The nearest colony

is at the North Gare where it appears to be in decline. Another species which appears to have declined significantly this century in Cleveland is *Balea perversa* agg. (see species notes below for details).
In contrast, it appears that populations of some nationally scarce species have remained stable in Cleveland e.g. the land snails *Leiostyla anglica*, *Spermodea lamellata*, *Zenobiella subrufescens* and *Ashfordia granulata*. The first three of these species are associated with ancient semi-natural woodland (Kerney & Stubbs 1980, Wardhaugh 1996, 1997, 2000) of which there are several in Cleveland and all four species are not uncommon in suitable habitats locally.
Several introductions into Britain occurred during the 20th century, including the slugs *Tandonia budapestensis* in 1930, *Deroceras panormitanum* in 1931 and *Boetgerilla pallens* in 1972 (Phillips & Watson 1930, Quick 1960, Colville, Lloyd-Evans & Norris 1974). All three are now present in Cleveland, the first two being common, synanthropic species.
Since the 19th century there have been several taxonomic revisions which are indicated in the Species Notes below. Some of these have involved the realisation that previously recognised species are in reality aggregates of two or three species. However, the taxonomic status of even some very common molluscs remains poorly understood, for example *Cochlicopa lubrica* and *C. lubricella*. This has resulted in a situation where it is sometimes difficult to ascribe a specific name to some specimens. Molecular genetic studies are starting to shed light on some of these problems with the result that further taxonomic revisions in the future seem not unlikely.
The notes which follow indicate that even a basic knowledge of the status and distribution of terrestrial molluscs in Cleveland is far from complete. Aims for the future might be to improve on this, possibly to collect quantitative data and to carry out autecological studies on some of the nationally scarce species which have strongholds in this area (e.g. Wardhaugh 2011). Such information would be invaluable in helping to gain a proper understanding of species requirements and hence further their conservation. Scope for future field study is therefore considerable.

## SPECIES NOTES

All records listed below were made by the author unless otherwise acknowledged, with specific dates indicating the most recent occasion on which a species has been recorded at a particular site. For the more common species the information provided is a summary of detailed records collected from 1980 to the present.

[D] = range declining nationally (Kerney & Cameron 1979)
[I] = range increasing nationally (Kerney & Cameron 1979)
[R] = Red data species (Norris 1998)

Like Dickens' Jacob Marley, field naturalists seem to be doomed to wander through the world for all eternity, obliged to carry an ever increasing chain of revisions to scientific nomenclature for the taxonomic groups which are their passion; the chains for terrestrial molluscs are no exception. It is indeed a ponderous chain, more links having been forged since the first version of this article appeared in 1999. Unlike those of Jacob Marley, these chains are not the work of the field naturalists who have to bear them and the ensuing confusion, in a system originally designed to aid rather than hinder communication. A plea for more stability in scientific nomenclature was made by no less a person than E.B. Ford, Professor of Ecological Genetics, All Souls, Oxford (Ford 1955). Would that it had been heeded.
In the following species accounts the first scientific name given is the most recent, based on Anderson (2005). However, the standard work for identification at present remains Cameron & Kerney (1979) and where names in this work differ from those of Anderson (2005) they are given second, in brackets ( ).
Where different again, the names used by Hawell are given last, in square brackets [ ].

These are, perhaps unsurprisingly, just some of the scientific names used both before Hawell's time and after, a point to be borne in mind should the reader consult some of the references cited.

Pomatias elegans [D] [R]
Habitat: loose, very calcareous soils.
Unknown in Cleveland. Scarce and at the northern limit of its known range at two sites elsewhere in VC 62:
Ashberry Hill and Lambert Hagg Wood area (SE 566855) 30.10.2010
Forge Valley (SE 9886) 6.5.1990
It has been suggested that the factor limiting the northerly distribution of this species is climatic, Kerney (1972) stating that "the main area of its distribution in Europe is rather closely bounded by the January isotherm for approximately 2$^{o}$C."

Acicula fusca [Acicula lineata] [D]
Habitat: associated with old woodland (Kerney & Stubbs1980). Moist sites.
Cleveland: Airy Holme Wood (NZ579113) 10.9.1995 and (NZ580112) 16.7.1995
First published record for this site: Watson (1854)
Overdale, near Sandsend (NZ854142) July 1999, R. Cameron (pers comm.)
Sites elsewhere in VC62:
Beast Cliff, Ravenscar (TA001993) 31.8.1994
First published record for this stie: Moore (1911)
Duncombe Park, Helmsley (SE614835) 12.4.1997
Forge Valley (SE9886) 26.9.1980, B. Colville (pers. comm.)

(SE9887) 16.10.1996, D. Lindley (pers. comm.)
Jugger Howe (SE948983) 19.7.1997 Lindley & Wardhaugh (1998)
Raygate Slack (SE8091) 17.5.1996 D. Lindley (pers. comm.)
Rievaulx Terrace (SE578847) 16 10.2010
Seivedale (SE853887) 18.9.1996 D Lindley (pers. comm.)
Stonecliffe Wood, Thirsk (SE 476858) 30.4.1972, B. Colville (pers. comm.)

Carychium minimum
Habitat: wetland and other damp sites.
Locally common in suitable sites.

Carychium tridentatum
Not recognised as a separate species from C. minimum in the 19th century.
Habitat: a variety of moderately moist to damp habitats.
Common and widespread in Cleveland.

Succinea oblonga [D] [R]
Habitat: wetland and other damp sites.
Nationally very scarce and unknown in Cleveland.
Elsewhere in VC62:
One pre-1950 record for the Scarborough area (Kerney 1999) but the site has since been lost (Norris 1998).
Nearest known site is at Ripon Parks, VC65, (SE300757) 15.6.2002 (Lindley & Wardhaugh 2004)

Succinea putris
Reliably separable from Oxyloma pfeifferi, the next species, only by anatomical details (Kerney & Cameron (1979). All records provided here for these two species have been confirmed by examination of internal features.
Habitat: wetland and other damp or moist sites, locally in both open places and woodland.
Cleveland:
Airy Holme Wood (NZ579113) 29.8.2012
Clarkson's Wood, Kilton (NZ707178) 6.9.1998
Mill Bank Wood, Kildale (NZ603098) 27.8.1999
(NZ5909) 19.7.2007
Saltburn Gill (NZ675208) 19.5.2007
19th Century records for Cleveland:
Great Ayton and Kildale (Hawell 1899).
Ashford (1879) recorded this species from "Redcar battery and Coatham marshes.....small and rather thick". Also, there are shells in the Baker Hudson collection labelled "Succinea putris, Coatham Marsh, 1884". However, specimens collected from here have been identified as Oxyloma elegans (see below).
Elsewhere in VC62:
Hagg Wood Marsh near Levisham (SE8389) 27.8.1998
Murton Wood, Caydale (SE531869) 16.8.1998
These two records and that for Clarkson's Wood, noted above, were confirmed by Mr F. Naggs, Natural History Museum, London. All others were confirmed by the present author.
Scarwell Wood, Forge Valley (SE9886 & SE9887) 15.2.2002
Nearby in VC66:
Aislaby Bank, near Yarm (NZ405123) 10.9.1999

Oxyloma elegans (Oxyloma pfeifferi) [Succinea elegans]
Habitat: wetland and margins of ponds and streams. Occasionally in other damp sites.

Cleveland:
Brewsdale, near Hilton (NZ466107) 9.9.1999
Coatham Marsh (NZ588248) 2.9.1999
Fairy Dell, Marton West Beck (NZ512150) 7.9.1999
Mill Bank Wood, Kildale (NZ6009) 8.5.2004
near Kildale (NZ607096) 8.5.2004
Newton Wood (NZ5712) 26.2.2000
Elsewhere in VC62:
Robin Hood's Bay (NZ953046) 22.7.1999
Nearby in VC66:
Burn Wood, near Longnewton (NZ388155) 8.9.1999

Azeca goodalli [Azeca tridens]
Habitat: Damp sites in woodland, beneath timber and in grass or moss.
Scarce and apparently nowhere common in Cleveland:
Airy Holme Wood (NZ5711) 8.5.2004
Clarkson's Wood, Kilton (NZ7017) 6.9.1998
Oakrigg Wood, (NZ781166) 26.3.2012
Rift's Wood (NZ6620) 16.5.1999
Saltburn Gill (NZ6720) 25.10.1994
Tockett's Mill (NZ6218) 15.8.1992

Cochlicopa lubrica
Habitat: a variety of moderately moist sites.
Common and widespread in Cleveland.

Cochlicopa lubricella
First described as a separate species from C. lubrica by Quick (1954) however the two are very similar in appearance and currently the taxonomic status of the genus in Europe is in doubt (Anderson 2005).
Habitat: Drier sites than those occupied by C. lubrica e.g. grassland.
Widespread and possibly quite common in Cleveland and probably under-recorded due to close similarity to C. lubrica.

Pyramidula pusilla (Pyramidula rupestris)
Habitat: limestone screes and dry stone walls.
Unknown in Cleveland.
Elsewhere in VC62 probably scarce (Kerney 1999):
Hawnby Hill (SE5390) 9.8.2008
Near Murton Grange (SE5388) 16.8.1998

Columella aspera
Recognised as a separate species from Columella edentula (see below) by Paul (1975). However, some specimens are difficult to ascribe to one of these two species.
Habitat: on herbage e.g. pendulous sedge (Carex pendula) or in leaf litter e.g. oak (Quercus sp.) and greater woodrush (Luzula sylvatica).
Cleveland:
Clarkson's Wood, Kilton (NZ7017) 10.7.1999 (An extensive population in dry oak/woodrush leaf litter)
Dunsdale Wood (NZ6018) 15.10.1989
Mill Bank Wood, Kildale (NZ6009) 8.5.2004

Mulgrave Woods (NZ8411) 23.6.1991
Newton Wood (NZ5712) 26.2.2000
Oakrigg Wood (NZ7816) 16.8.2011
Rifts Wood (NZ6620) 16.5.1999
Whitecliff Wood (NZ7118) 28.5.1997

*Columella edentula* [*Vertigo edentula*]
Habitat: moist leaf litter in old deciduous woodlands. Sometimes on herbage e.g. pendulous sedge or yellow flag (*Iris pseudocorus*).
Cleveland: quite common. Seventeen known sites.

*Vertigo pusilla* [D] [R]
Habitat: old dry stone walls, typically with ivy and overhanging shrubs or trees.
Cleveland:
Delve (NZ792046) 27.8.1998 First recorded by B. Colville, 21.9.1975 (Norris 1977).
(n.b. in this publication the grid reference given for this site is incorrect, B Colville pers. comm.).
Near Egton Bridge (NZ798049) 27.8.1998
Ashford (1879) records this species as being found "near Guisborough, very scarce"
by Rev. W.C. Hey (see also Hey 1878).
Elsewhere in VC 62:
Ayton, near Scarborough (at the old hall), Hargreaves (1890)
Ayton, near Scarborough (on castle wall), recorded by W.Gryngell 1923 (Wallis and Wallis 1956)
Helmsley (SE600835) 31.10.2009
Rievaulx Terrace (SE578847) 16.10.2010

*Vertigo antivertigo* [D]
Habitat: wetland species.
Cleveland:
Kildale 10.7.1972 recorded by A. Norris (Dearing 1972). Not re-located during recent visits to this area.
Elsewhere in VC62:
Hagg Wood Marsh (SE8389) 6.10.1989
Jenny Brewster's Spring, nr. Thimbleby 22.5.2004 (Lindley & Norris 2005)
Riccaldale (SE626884) 20.5.1995
Recorded from a few other 10km squares in VC62 (Kerney 1999)

*Vertigo substriata* [D]
Habitat: marshy grassland and wet sites in old woodland e.g. in moss, on pendulous sedge and yellow flag. Associated with ancient semi-natural woodland, at least locally (Kerney & Stubbs 1980, Wardhaugh 1997, 2000).
Cleveland:
Airy Holme Wood (NZ5711) 8.5.2004. First recorded here by Watson (1854)
Avens Wood (NZ7013) 3.9.1985
Jenny Brewster's Spring, nr. Thimbleby 22.5.2004 (Lindley & Norris 2005)
Mill Bank Wood, Kildale (NZ6009) 8.5.2004
Mulgrave Woods (NZ847115) 5.1.2008
Wilton Wood (NZ5919) 30.10.1994
Early records fro Cleveland:
"Guisborough Woods, not rare", recorded by Rev. W.C. Hey (Ashford 1879)
"Great Ayton quarries" recorded by B.R. Lucas (Hawell 1899)
There are two shells in the Baker Hudson collection labelled "*Vertigo antivertigo*, Skelton Woods 1883" but these are in fact *V. substriata*.

Elsewhere in VC62:
Forge Valley (SE9887) 21.8.1986
Hagg Wood Marsh (SE8389) 10.6.1989
Jugger Howe (SE948983) 19.7.1997 (Lindley & Wardhaugh 1998)
Ramsdale (NZ9203) 6.5.1989

*Vertigo pygmaea*
Habitat: wet grassland on rushes and sedges. Sometimes in drier habitats such as dry stone walls.
Cleveland:
Airy Holme Wood (Watson 1854). Re-found 7.10.1972 by A. Norris (Dearing 1972). Not re-located during more recent visits.
Skinningrove, in coastal grassland (NZ712203) 3.9.2011
Other 19th century records for Cleveland:
Ingleby Greenhow and Saltburn (Hawell 1899)
Wilton Wood (Ashford 1879). Not re-located during recent visits.
Elsewhere in VC62:
Cockayne, Bilsdale (SE618983) 12.5.2012
Cow House Bank (SE6088 SE6188) 12.5.2012
Ellerburn Banks (SE8584) 21.5.1994
Jugger Howe (SE948983) 19.7.1997 (Lindley & Wardhaugh 1998)
Riccaldale (SE626884) 20.5.1995
Nearby in VC66:
Quarrington cemetery (NZ335379) 14.5.2006
Wingate quarry reserve (NZ3737) 30.5.2000

*Vertigo alpestris* [D] [R]
Habitat: sheltered dry stone walls.
Distribution in Britain restricted very largely to the Lake District and Pennines.
Unknown in Cleveland:
Elsewhere in VC62:
Duncombe Park, nr Helmsley (SE595836) 7.6.2003 and (SE600835) 31.10.2009. This is the only known site for this species in VC62.

*Vertigo geyeri* [D] [R] Red Data Book status: endangered (Bratton 1991)
Habitat: marshy areas associated with the bog rush *Schoenus nigricans*.
Nationally scarce (Colville 1998).
Unknown in Cleveland.
Elsewhere in VC62:
Ellerburn Banks (SE8584) 21.5.1994 (Lindley 1995)
Jugger Howe (SE948983) 19.7.1997 (Lindley & Wardhaugh 1998)

*Abida secale* [D] [R]
No recent records for VC62 (Kerney 1999) but there are specimens in Leicester Museum labelled "Helmsley (H. Teetham coll., 1890)" (M.P. Kerney pers. comm.).

*Pupilla muscorum* [*Pupa muscorum*] [D]
Habitat: dry, open calcareous grassland and sand dunes.
Cleveland:
Marske sand dunes (NZ6522) 14.7.1985; (NZ634231) 25.4.2003
Mount Grace Priory walls (SE4498) 1962 (Morehouse 1963)
Hawell lists this species as present at Redcar, Saltburn and Staithes. The B. Lucas collection contains over 60 specimens labelled "Redcar 26.9.1925." Hence this species may have declined

locally during the 20th century.
Recent records elsewhere in VC 62:
Beast Cliff top (TA0098) 20.8.1987
Caydale (SE5386) 5.6.1994
Silpho, disused quarry (SE9591) 19.8.1987
Nearby in VC 66:
Bishop Middleham Reserve (NZ3332) 27.7.2012
North Gare breakwater and dunes (NZ533288) 29.4.2007
Nr. Seal Sands (NZ5125) 24.7.1996

Leiostyla anglica [Pupa anglica] [D]
Habitat: associated with damp areas in ancient semi-natural woodland but also in open, marshy sites.
Cleveland:
Recorded from 13 localities.
The woodlands of the north-east coast of VC62 seem to be something of a stronghold for this species which has a predominantly westerly distribution in Britain (Kerney 1999).

Lauria cylindracea [Pupa cylindracea]
Habitat: varied. Woodland, grassland and dry stone walls.
Widespread and common in Cleveland.

Vallonia costata [Helix pulchella var. costata]
Habitat: dry calcareous places e.g. short turf grassland and dry stone walls and dunes.
Cleveland:
Cattersty dunes (NZ711203) 25.10.2012
Hawell (1899) lists this species as present in Saltburn and Redcar. Also, there is one shell in the J. Hawell collection labelled "Saltburn 2.4.1883."
Elsewhere in VC 62:
Ashberry Hill (SE564856) 1.5.1993
Duncombe Park (SE607829) 12.4.1997
Rievaulx Terrace (SE578847) 16.10.2010
Nr. Sandsend (NZ8512) 18.6.2005

Vallonia pulchella [Helix pulchella] n.b. see next species.
Cleveland: no recent records for V. pulchella sensu stricto.
Elsewhere in VC 62:
Nr. Murton Wood, Caydale (SE531869) 16.8.1998

Vallonia excentrica
Not recognised as distinct from V. pulchella in the 19th century.
Habitat: dry, calcareous places.
Cleveland:
Coatham Marsh Reserve: (NZ5824) 8.2.1992
Two shells in the J. Hawell collection labelled "Saltburn, 2.4.1883."
Elsewhere in VC 62:
Ashberry Hill (SE564856) 1.5.1993
Ashberry Pasture Reserve (SE567853) 1.5.1993
Duncombe Park (SE609823) 12.4.1997
Hawnby Hill (SE 5390) 9.8.2008
Rievaulx Terrace (SE578847) 30.8.2000

Silpho, disused quarry (SE9591) 28.7.1987
Nearby in VC66:
North Gare (NZ5328) 29.4.2007
Nr. Seal Sands (NZ5125) 22.7.1994

Acanthinula aculeata [Helix aculeata]
Habitat: moderately moist areas in woodland leaf litter
Cleveland: not uncommon but never found in dense populations.

Spermodea lamellata [Helix lamellata] [D]
Habitat: a strong association with ancient-semi natural woodland both nationally (Kerney & Stubbs 1980) and locally (Wardhaugh 1997, 2000). Most often in deep, moist beech or oak leaf litter (Wardhaugh 2011).
The woodlands of the coast of north-east Yorkshire are a stronghold for this species which has a predominantly northern and western distribution in the British Isles (Kerney 1999).
Cleveland:
Avens and Gerrick Woods, June 1983 (Norris 1984)
Clarkson's Wood, Kilton (NZ705177) 25.8.2008
Dunsdale Wood (NZ6018) 15.10.1989
Mains Wood (NZ7016) 17.8.2009
Mill Bank Wood, Kildale (NZ5909) 8.2.2011 (Also var. albina, white shelled individuals on 18.7.2008; Wardhaugh 2008)
Mines Wood (NZ7617) 20.8.2012
Mulgrave Woods (NZ847115) 5.1.2008
Oakrigg Wood (NZ781166) 23.3.2012
Rifts Wood (NZ6620) 16.5.1999
Rosecroft Wood (NZ7117) 6.9.1998
Saltburn Gill (NZ6720) 19.5.2007
Tockett's Mill (NZ6218) 15.8.1992
West Arnecliff Wood (NZ7804) 21.7.2007 (Wardhaugh & Wardhaugh 2008)
Whitecliff Wood (NZ7118) 28.5.1997
Wilton Wood (NZ5919) 8.9.1998

Merdigera obscura (Ena obscura) [Buliminus obscura]
Habitat: woodland (often on tree trunks), scree, dry stone walls.
Cleveland:
Airy Holme Wood (NZ5711) 15.10.2012
Hummersea Scar (NZ7219) 24.7.1983
Nr. Kildale (NZ607096) 19.7.2007
Lazenby Bank (NZ573192) 26.9.2012
Mill Bank Wood, Kildale (NZ5909) 5.9.1998
Mines Wood (NZ7617) 20.8.2012
Mulgrave Woods (NZ844119) 20.6.2012
Oakrigg Wood (NZ781166) 23.3.2012
Yearby Wood (NZ6020) 19.10.2012
Elsewhere in VC 62:
Thirteen other known sites, all to the south in calcareous areas. A reliable place to see this species in summer months is at Rievaulx Terrace, on the trunks of beech and other trees along the woodland walk. Here, specimens with the shell heavily coated in lichen fragments or other material have often been seen in recent years. For a description of this curious habit see Wardhaugh (2010).
Hawell (1899) lists this species as present at Ingleby Greenhow (original reference, Roebuck 1890), Kildale, Kilton (original reference, Hudson 1889), Mount Grace, Mulgrave, Saltburn and Staithes.

Other 19th century records include Airy Holme Wood (Ashford 1879) and specimens in the Baker Hudson collection labelled “Great Ayton 1882”.

Punctum pygmaeum [Helix pygmaea]
Widespread and common in moderately moist habitats but easily overlooked due to its small size.

Discus rotundatus [Helix rotunda]
Widespread and very common.

Arion ater agg.
Widespread and very common, the black from in more natural habitats and other colour forms much more strongly synanthropic. Now recognised as two species, A. ater and A. rufus, reliably separable only on dissection (Anderson 2005).

Arion flagellus
Not recognised as a separate species from A. ater in the 19th century. Possibly introduced and spreading nationally in recent times.
Cleveland:
Thirteen other known sites, all to the south in calcareous areas.
Hawell (1899) lists this species as present at Ingleby Greenhow (original reference, Roebuck 1890), Kildale, Kilton (original reference, Hudson 1889), Mount Grace, Mulgrave, Saltburn and Staithes. Other 19th century records include Airy Holme Wood (Ashford 1879) and specimens in the Baker Hudson collection labelled “Great Ayton 1882”.

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Not recognised as a separate species from A. ater in the 19th century. Possibly introduced and spreading nationally in recent times.
Cleveland:
Grosmont (NZ827054) 25.9.2012
Nr. Great Ayton (NZ568110) 31.8.2005
Nearby in VC62:
Forge Valley (SE989857) 25.9.2012
Nearby in VC65:
Foxglove Covert Reserve, Catterick (SE1697) 16.6.2012

Arion subfuscus
Widespread and common.

Arion circumscriptus [Arion fasciatus]
This and the next two species were not recognised as distinct from one another in the 19th century and referred to by Hawell (1899) as Arion fasciatus. In the 1970’s three segregates were described

as listed here ( Kerney & Cameron 1979). More recently doubt has been cast upon this segregation (Geenan et al. 2006).
Arion circumscriptus seg. is widespread and very common in Cleveland.

### Arion silvaticus
Habitat: most often encountered in woodland.
Occasional in Cleveland.

### Arion fasciatus
Fairly common. Synanthropic.

### Arion distinctus
This species belongs to the Arion hortensis aggregate which was reclassified as three species, A. hortensis, A. distinctus and A. owenii by Davis (1979). Of these, A. distinctus is widespread and very common in Cleveland. It is therefore surprising that Hawell (1899) does not refer to this species group at all. In Cleveland A. owenii is unknown. A. hortensis s.s. has been recorded as follows.

### Arion hortensis s.s.
This species was first recorded from Cleveland on 2.2.2011 (Airy Holme Wood, NZ5711). Either it has been overlooked in the past due to its close external similarity to A. distinctus or it has extended its range in recent times. The latter is possible because up to this time it was virtually unknown in VC62.. I am grateful to Dr. Ben Rowson of the National Museum of Wales for confirming identification of voucher specimens from Woodcock Wood.
Airy Holme Wood (NZ5711) 23.11.2011
Eston Hills area NZ5518) 24.4.2012
Hazel Grove (NZ6521) 21.3.2012
Kirkletham churchyard (NZ594218) 29.9.2011
Woodcock Wood, Flatts Lane (NZ5417) 15.11.2012

### Arion intermedius
Common and widespread. Not referred to by Hawell (1899).

### Vitrina pellucida
Widespread and very common from woodland to dune slacks, maturing in autumn and winter.

### Vitrea crystallina [Hyalinia crystallina]
Widespread and very common.

### Vitrea contracta
Not recognised as distinct from the above species in the 19th century.
Habitat: usually drier places than V. crystallina, typically beneath rocks and stones.
Widespread and common.

### Nesovitrea hammonis [Hyalinia radiatula]
Widespread and common.

### Aegopinella pura [Hyalinia pura]
Widespread and common.

### Aegopinella nitidula [Hyalinia nitidula]
Widespread and common. Somewhat synanthropic.

Oxychilus drapanaudi [I]
Habitat: dune slacks and grassland.
Coatham dunes (NZ5825) 7.7.1991
Coatham Marsh (NZ5824) 8.2.1992
Eston, derelict reservoir site (NZ558177) 24.4.2012
Marske dunes (NZ639227) 10.5.2008
Not listed by Hawell (1899). Not common in VC62 (Kerney 1999).

Oxychilus cellarius [Hyalinia cellaria]
Widespread and common.

Oxychilus alliarius [Hyalinia alliaria]
Widespread and very common.

Oxychilus helveticus navarricus (Oxychilus helveticus) [Hyalinia glabra]
Scarce in VC62 and at the northern end of its range in Britain (Kerney 1999).
Cleveland:
Airy Holme Wood (NZ5711) 29.8.2012
Flatts Lane Country Park (NZ548166) 29.12.2011
Marton West Beck (NZ518143) 4.8.1993
Rift's Wood (NZ664207) 6.1.2012
Nearby in VC66:
Wolviston, in an old pile of building rubble in a hedgerow (NZ454259) 13.4.1994
Hawell records this species as found in "Wilton" by B.R. Lucas. There are shells in the Baker Hudson collection labelled "near Stainton" 4.8.1886".

Zonitoides excavatus [Hyalinia excavata]
Habitat: ground litter, under logs and bark in non-calcareous woodlands.
Cleveland:
Mill Bank Wood, Kildale (NZ6009) 19.7.2007 and (NZ5909) 8.2.2011
Tranmere Wood, Ingleby Greenhow (NZ598026) 29.3.2009
Hawell (1899) records it as present in Ingleby Greenhow and Kildale, both in 1893.
Recorded in Arnecliff Wood, Egton (Fysher 1925).
Elsewhere in VC 62:
Ramsdale (NZ926035) 6.5.1989
Newtondale (SE8394) 7.5.1994
Scar Wood, Jugger Howe (SE9497) 19.7.1997 (Lindley & Wardhaugh 1998)
Staindale, Dalby Forest (SE8890) 1.10.2005

Zonitoides nitidus
Habitat: wetland sites.
Cleveland: no recent records but see Kerney (1999).
Hawell (1899) records it from Ingleby Greenhow.

Milax gagates [Amalia gagates]
Habitat: typically synanthropic.
No recent records but see Kerney (1999).
Nineteenth century record: "Middlesbrough, kitchen gardens which are the remains of the old Tea Gardens" Hudson (1886b).

Tandonia sowerbyi (Milax sowerbyi) [Amalia sowerbyi]
Habitat: typically synanthropic.

Coatham Marsh 7.10.1972 (Dearing 1972).
See also Kerney (1999).
Hawell (1899): Middlesbrough.

*Tandonia budapestensis* (*Milax budapestensis*) [I]
An introduced species first recorded in Britain by Phillips & Watson (1930).
Widespread, common and synanthropic in Cleveland.

*Boetgerilla pallens* [I]
An introduced species with the first British record being in 1972 (Colville, Lloyd-Evans & Norris 1974). Spreading rapidly.
Cleveland:
Airy Holme Wood (NZ5711) 29.8.2012
Bousdale Wood, Guisborough Forest (NZ591146) 27.3.2010
Clarkson's Wood, Kilton (NZ7017) 1.9.1990
Cliff Ridge disused quarry (NZ573117) 14.6.1995
Dalehouse, Staithes (NZ7717) 20.8.2012
Grosmont car park area (NZ827054) 25.9.2012
Marton, garden of 13 Capt. Cook's Cresc. (NZ525152) 3.8.2010
Mulgrave Woods (NZ8411) 2.6.2007
Ormesby, St. Cuthbert's churchyard (NZ531167) 27.7.2011
Saltburn Gill (NZ7620) 10.7.1999
Whitecliff Wood (NZ7118) 19.5.1996

*Limax maximus*
Widespread and quite common

*Limax cinereoniger* [D]
Habitat: associated with ancient semi-natural woodland at least locally (Kerney & Stubbs 1980, Wardhaugh 1997, 2000) although not exclusively so as it occurs locally in a few other relatively undisturbed sites e.g. Lazenby Bank and the Eston Moor areas (see below)
Cleveland:
Avens and Gerrick Woods, June 1983 (Norris 1984)
Clapham's Wood (NZ563162) 30.10.2012
Clarkson's Wood, Kilton (NZ7017) 19.9.1998
Easington Wood, Scaling Dam, 17.5.1981 (Lloyd-Evans 1982)
Eston Moor (NZ5617) 16.8.2012
Lazenby Bank (NZ5718) 28.6.2012
Mill Bank Wood, Kildale (NZ6009) 8.5.2004
Mulgrave Woods (NZ8411) 2.6.1999
Newton Wood (NZ5712) 17.5.1998
Oakrigg Wood (NZ7816) 16.8.2011 This was an unusually pale specimen (Wardhaugh in press)
Rye Hill Wood area, Eston (NZ5517) 3.5.2012
Wilton Wood (NZ5919) 21.7.1994
nr. Wilton Castle (NZ5819) 10.8.1995
Elsewhere in VC62:
Ashberry Pasture Reserve (SE5685) 1.5.1993
Big Wood, Thimbleby 22.5.2004 (Lindley & Norris 2005)
Buber Wood, Goathland (NZ821030) 17.8.2002
Cow House Bank, nr. Helmsley (SE6188 SE6088 SE6089) 12.5.2012
Hayburn Wyke (TA0096) 26.9.1992
Kirkdale Wood East (SE674862) 25.4.1999

May Beck (NZ8803/4) 8.8.2002
Rievaulx Terrace (SE578847) 25.5.2002
Staindale, Dalby Forest (SE8890) 1.10.2005

Limacus flavus agg. (Limax flavus)
This group includes two closely related species Limacus flavus and L. maculatus that are very similar in external appearance. In the past the latter was thought to be very largely confined to Ireland but recently it seems to be spreading rapidly in England. It may be that some older records refer to L. maculatus rather than to L. flavus and for this reason it is probably safer to consider all records below as species aggregates for the present.
Habitat: synanthropic
Cleveland:
Middlesbrough, yard to rear of Aske Road (NZ4919) 1978
Lodge Gill, Ormesby (NZ526164) 29.4.2012
St. Cuthbert's churchyard, Ormesby (NZ531167) 27.7.2011
Stewart Park (NZ5116) 7.12.2011
Elsewhere in VC62:
Hutton-le-Hole Museum grounds (SE707900) 31.8.2005
Nearby in VC66:
Teesside High School grounds (NZ4214) 4.5.1993
Not listed by Hawell (1899)

Malacolimax tenellus (Limax tenellus) [D] [R]
Habitat: associated with ancient semi-natural woodland (Kerney & Stubbs 1980).
Known from only four sites in VC62:
Dovedale Griff, Dalby Forest (SE870910) 16.8.1988.
Egg Griff, Dalby Forest (SE8791) A. Norris 23.8.1987 (Norris & Lindley 2011)
East Arnecliff Wood (NZ792046) 28.9.1992, J. Nelson (B. Colville pers. comm.)
Low Wood, Bransdale (SE6294) 23.7.1999 (Alexander 1999).
West Arnecliff Wood (NZ783050) 21.7.2007 (Wardhaugh 2008b)

Lehmannia marginata (Limax marginatus)
Habitat: damp woodland, often ascending tree trunks. Dry stone walls.
Quite common in Cleveland.

Lehmannia valentiana (Limax valentianus)
Originating from the Iberian peninsula, this is an introduced species known in Britain for a long time as an inhabitant of greenhouses. From about 1980 it has been found living outdoors to an increasing extent and has spread rapidly during the early 21st century.
One known outdoor site in Cleveland:
Marton, garden of 13 Capt. Cook's Cresc. (NZ525152) first recorded 26.9.2008, possibly accidentally imported from a garden centre. Seemingly established and still present in 2012.

Deroceras leave [Agriolimax laevis]
Habitat: marshy areas, including stream banks in woodland and open places.
Quite common in suitable habitat.

Deroceras reticulatum [Agriolimax agrestis]
Widespread and very common.

Deroceras panormitanum (Deroceras caruanae)
This is probably an introduced species, first recorded in Britain in 1930 (Quick (1960).

Habitat: synanthropic but found in a wide variety of habitats. Very common.

### Euconulus alderi

Not recognised as a separate species from *E. fulvus* (see below) in the 19th century. However, distinction between the two is not always clear cut and there is uncertainty about specific status of members of this genus in Europe (Anderson 2005).
Habitat: marshy places, including stream sides.
Found occasionally in suitable habitat in Cleveland.

### Euconulus fulvus [Hyalinia fulva]

Common and widespread in a variety of moderately moist habitats in Cleveland.

### Cecilioides acicula

Habitat: subterranean in calcareous areas. Sometimes empty shells can be found on molehills or by rabbit burrows.
No recent Cleveland records.
Elsewhere in VC62:
Ashberry Hill (SE564856) 1.5.1993
Nr. Lastingham, 1969 (Dearing 1970)
Rievaulx Terrace (SE578846) 6.5.2011
See also Kerney (1999)
Dixon & Watson (1854), also quoted in Hawell (1899), recorded it as "once abundant in flood debris on the River Tees near Middlesbrough".

### Cochlodina laminata [Clausilia laminata]

Habitat: some association with old woodland in the local area (Wardhaugh 1997, 2000).
Fairly common, with16 known sites in Cleveland.
Ashford (1879) lists it as occurring "round Roseberry but not common" but not found recently in Newton, Cliff Ridge or Airy Holme Woods hence it may have been lost from this area.

### Clausilia bidentata [Clausilia perversa]

Habitat: woodland, hedgerows and dry stone walls.
Fairly common and widespread in Cleveland, more often in older woodland. Also dunes and coast e.g. Cattersty and Hummersea areas.

### Clausilia dubia

Never recorded in VC62 but occurs in the Pennines and nearby at a few places on the Durham coast e.g. Hawthorn Dene (NZ440460) 25.5.1998. See also Kerney (1999) and Lowe (1989).

### Balea heydeni

Recognised as a separate species from *Balea perversa* by Gittenberger *et al.* 2006), the distribution and habitats of the two segregates are as yet unclear. *B. heydeni* may be the more common of the two in easterly parts of Yorkshire.
*B. perversa* agg. has declined nationally, possibly due to atmospheric pollution (Holyoak 1978). A tentative suggestion is that air pollution may have destroyed tree trunk lichens upon which it may feed. Whether this applies to one or both of the two recently recognised segregates is unknown.
Habitat: for *B. perversa* agg. this is described as dry stone walls, rocky outcrops and tree trunks (Kerney & Cameron 1979). Scarce in Cleveland;
Slapewath (NZ6352115889), north side of road, April 2012 (A. Norris, pers. comm.)
Slapewath (NZ63451585), south side of road, 22.4.2012
Elsewhere in VC62:
Hutton-le-Hole (SE707895) 31.8.2005

VC66:
The Howls (NZ4631) 23.5.2012, a CNFC meeting.

Balea perversa s.s.
See comments above for B. heydeni.
No recent records for Cleveland.
Watson (1854) recorded B. perversa agg. in Airy Holme Wood and Hawell (1899) lists it as occurring in Ingleby Arncliffe, Ingleby Greenhow, Kildale and Wilton Wood. Also there are specimens in the Baker Hudson collection labelled "1884, near Ingleby Greenhow."
The subjective impression is that B. perversa agg. has disappeared from the non-calcareous northern parts of VC62 but that it has persisted on dry stone walls in calcareous areas in the south.
Recent VC62 records (all for B. perversa agg. and which would therefore benefit from reassessing in order to ascribe to the two new segregates):
Duncombe Park (SE6182) 12.4.1997
Noddle End, near Murton Grange (SE526886) 16.8.1998
Raincliffe Wood (SE9988) 24.8.1989
Sinnington (SE7486) 21.9.1996
Nearby in VC65:
B. perversa s.s. Forcett Park (NZ1712) 24.7.2004

Testacella scutulum
No recent Cleveland records. Occurs at Valley Gardens, Scarborough (Norris 1987).
Not listed by Hawell (1899).

Candidula intersecta [Helix caperata]
Habitat: dunes and dry calcareous grassland.
Common at suitable coastal localities (e.g. Wardhaugh 2004)

Candidula gigaxii
Unknown in Cleveland but present at a few sites in north-east Yorkshire and Durham (Kerney 1999, Lowe 1989).

Cernuella virgata [Helix virgata]
Habitat: dunes and dry calcareous grassland.
Very common at suitable coastal localities (e.g. Wardhaugh 2004)

Helicella itala [D] [R]
Habitat: dunes and dry calcareous grassland.
No recent records for Cleveland.
Ferguson (1860) describes this species as present on "sandhills in front of Coatham, not so plentiful as formerly". There are shells in the Baker Hudson collection labelled "Coatham, 1887" and others at the Dorman Museum from the same place, dated 1890. Helicella itala has not been found during numerous visits to Coatham dunes in recent years. The nearest known colony is at the North Gare in VC66 (NZ5327 & NZ5328) where the species appears to be in decline. Live specimens were found here (NZ538285) on 17.9.2002. See also Birtle (2000).
Bishop Middleham Reserve (NZ3332) 27.7.2002. A large population.
There are a few other records for this species elsewhere in VC62 (Kerney 1999).

Monacha cantiana [Helix cantiana] [I]
Habitat: grassland, notably roadside verges and river banks.
At the northern limit of its British distribution in this area, M. cantiana is expanding its range nationally but was already present in Cleveland in the 19th century. Hawell (1899) noted it "on the

railway batter at Ingleby Greenhow" and quotes T.A. Lofthouse as finding it at Great Ayton, "a field's distance from the railway."
Recent Cleveland records:
Brewsdale (NZ4610) 19.5.1993
Dalehouse, Staithes (NZ7717) 20.8.2012
Eston area, derelict reservoir site (NZ558177) 24.4.2012
Great Ayton, near the railway line (NZ572113) 28.8.1993
and nearby (NZ571112) on 7.5.1999 (possibly the same site as that described by Hawell, see above). Also nearby (NZ567109) on 2.9.2007
Lazenby (NZ568203) 29.10.1995
Leven Bridge (NZ445123) 29.9.1998
Weary Valley (NZ456095) 9.3.1991
Nearby in VC66:
Biship Middleham Reserve (NZ3332) 27.7.2012
Egglescliffe, on bank of the Tees (NZ429141) 24.1.1994

Ashfordia granulata [Helix granulata]
Habitat: damp areas, mostly in old woodland, sometimes ascending vegetation. Virtually endemic to Britain (Kerney & Cameron 1979).
Recorded recently at 15 sites in Cleveland.
Hawell (1899) lists it as present at eight localities.

Zenobiella subrufescens [Helix fusca] [D]
Habitat: strongly associated with ancient semi-natural woodland at least locally (Kerney & Stubbs 1980, Wardhaugh 1997, 2000). Can be found ascending vegetation. Matures in autumn and winter and can be overlooked at other times of year.
Recorded recently at ten sites in Cleveland.
Hawell (1899) recorded it at seven localities.

Trochulus striolata (Trichia striolata) [Helix rufescens] [I]
Habitat: gardens, roadside verges, hedgerows, woodland and other places, often near human habitation.
Widespread and common at the present time. Hawell (1899) provides just one record, "about a mile from Mount Grace on the Middlesbrough side" suggesting an expansion in range locally, in line with national trends during the 20th century.

Trochulus hispidus (Trichia hispida) [Helix hispida]
Habitat: varied, damp to fairly dry sites both woodland and open areas.
Widespread and common.

Arianta arbustorum [Helix arbustorum]
Habitat: chiefly deciduous woodland.
Quite common and widespread.

Helicigona lapicida
No recent records for Cleveland. Not listed by Hawell (1899).
Elsewhere in VC62;
Cropton Banks Wood, near Appleton-le-Moors, one empty shell, 25.5.1985 (Norris 1986).
nr. Helmsley (SE600835), four empty shells, 31.10.2009
There are a few older records for elsewhere in VC62 (Kerney 1999).
Nearest known locality for live animals: Jervaulx Abbey walls in VC65 (SE1785) 16.6.2007 (There are shells from here in the B.R. Lucas collection dated 17.5.1926).

Cepaea nemoralis [Helix nemoralis]
Habitat: varied, including deciduous woodland, grassland and dunes.
Widespread and common.

Cepaea hortensis [Helix hortensis]
Habitat: more restricted than for C. nemoralis, to some extent occurring in more moist habitats e.g. river and stream side vegetation, and clay cliffs along the coast.
Quite common in suitable habitat.
There is some evidence to suggest that this species has expanded its range locally. Ashford (1879) comments that it is unknown in the area. Hudson (1884) wrote "I have not found [C. hortensis] nearer to the sea than about seven miles" and he regarded it as uncommon in Cleveland (Hudson 1886a). See also anon. (1887) where just five known records are provided for the area. Records in Taylor (1894-1921) for VC62 are all southerly.

Cornu aspersum (Helix aspersa)
Habitat: gardens and similar places, being strongly synanthropic. Also sand dunes and coastal grassland.
Widespread and common (Wardhaugh 1994).

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