



Non-marine Molluscs of Chudleigh Parish

Recorded by Michel Ragody Hughes

The earliest record of snail collecting in Devon is from 1803. To date some 150 species of non-marine Molluscs have been recorded in the County, comprising land snails and slugs, freshwater snails and bivalves. The earliest record of snail collecting within the Parish of Chudleigh is from 1917. Concerted 'hunting' within the Parish since 1985 has produced a total of 38 land snail species, 22 slug species and 5 freshwater snail species. The only detailed analytical study of snails and slugs in the Parish (a study into the diversity and abundance of snail and slug species relative to different woodland habitat conditions) was conducted at Chudleigh Woods during 1991¹.

The mollusc fauna of the Parish comprises a diversity of species variously associated with woodlands (ancient, secondary and replanted broadleaved, wet woodland and conifer plantations), scrub, hedgerows, grasslands (unimproved neutral, improved pastures, road verges and churchyard), cultivated land (arable farmland, gardens and allotments), waste ground, heathland, walls, dwellings, former quarries, damp ground and watercourses (ditches, streams, the Town Mill Leat, Bramble Brook, Kate Brook and the River Teign)².

The significant range of habitats found within the Parish, together with its geology, particularly where Mid-Devonian limestone outcrops, exert a major influence on this diversity. It is worth noting that many species in western and south-west Britain extend into a wider range of habitats than elsewhere in the country due to the milder oceanic climate, including the influence of higher rainfall.

Species in Britain can be broadly categorised as *Native* or *Introductions* (deliberate or accidental), with numerous of the introduced species referred to as *Synanthropic* (meaning to be closely associated with man and often dependent on man-made habitats, tolerant of disturbed conditions and spread rapidly through man's activities).

Species recorded within the Parish are listed in taxonomic order and the nomenclature given is the most recently accepted. Although English species names are given it should be noted there are no consistently accepted English names.

Only publically accessible lands within the Parish, as well as private land where access has been accorded, have been sampled.

For those who may wish to learn how to identify the molluscs within the Parish a list of field guides is provided at the end of the species accounts.

¹ Heather Anne Hughes (1992). *An Investigation into the pattern of distribution of the Mollusca in Chudleigh Wood, Devon*. Undergraduate Dissertation submitted in part completion of the Degree of Bachelor of Education, University of Exeter (Rolle Faculty of Education).

² Species specifically introduced to garden ponds to control algae and clean up organic detritus are not considered here.

Terrestrial Snails

Family: *Aciculidae*

Acicula fusca (Point Snail)

A very small snail (adult shells max. 2.5mm) of ancient woodland which appears intolerant of human disturbance. It is widespread but localised in Britain, with the strongest distribution and populations seemingly found in Devon (though this may reflect survey effort!). It is recorded from Chudleigh Woods and may well be found elsewhere in the Parish by fine sifting dried leaf-litter from other suitable woodlands.

Family: *Carychiidae*

Carychium minimum (Herald Snail)

A very small snail (adult shells max. 1.9mm), it is a nationally widespread and common species found in a variety of moist habitat types, including woodlands.

Carychium tridentatum (Slender Herald Snail)

Very similar to the previous species and often found with it, but it generally prefers drier conditions. It is nationally widespread and common. Within the Parish it has been found associated with hedgerows and woodlands, particularly where more base-rich soil conditions prevail.

Family: *Clausiliidae*

Balea heydeni (Tree Snail)

Until the early 2000s only a single species known as *Balea perversa* was recognised in Britain. However, it is now accepted there are in fact two species, though their separate distributions and ecology have not been fully elaborated. The species is a lichen-feeder on tree bark, old walls and rocks. Of the two species only *Balea heydeni* has been recognised in the Parish, on old limestone walls.

Clausilia bidentata bidentata (Common Door Snail)

Common and widespread over much of Britain, it is associated with woodlands, hedgebanks, old walls and rocky areas, preferentially on base-rich soils.

Cochlodina laminata (Plaited Door Snail)

A species of both base-rich deciduous (particularly ancient) woodlands as well as rock faces. It was first recorded in Devon in 1844 but its general distribution and scarcity in the county closely reflects geology. It has been recorded from Chudleigh Woods, Chudleigh Rocks and Puttshill Wood.

Family: *Cochlicopidae*

Cochlicopa cf. lubrica (Slippery Moss Snail)

A nationally widespread and common species. It is found in a wide range of habitats, though shows a preference for more moist conditions, including grasslands and woodlands.

Cochlicopa cf. lubricella (a Slipper Snail)

A nationally widespread though generally less common species than the previous. It is reasonably catholic in its requirements and though frequently found with *C. lubrica*, it is often replaced by it in damp conditions. In the Parish it has been found associated with former quarry workings and rocky woodlands.

Family: *Discidae*

Discus rotundatus (Rounded Snail)

A widespread and often very common species throughout Britain and no exception in Chudleigh Parish. It is most frequently found in woodlands (broadleaf and conifer), hedgerows and areas of damp vegetation.

Family: *Enidae*

Merdigera obscura (Lesser Bulin)

A widespread and common species in England and Wales, becoming local northwards into Scotland. It is associated with woodlands, hedgerows, old walls, former quarry workings and other shaded habitats, particularly where more calcareous conditions prevail.

Family: *Ferussaciidae*

Cecilioides acicula (Blind Snail)

A subterranean species of rocky, well-drained calcareous soils. It is considered likely to have been introduced from the Mediterranean. The first Chudleigh record was made in 1917 and more recently it has been found in Chudleigh Woods.

Family: *Helicidae*

Arianta arbustorum arbustorum (Copse Snail)

A widespread species in Britain. It is local in the Parish, associated with damper conditions of road verges and woodlands.

Cepaea nemoralis nemoralis (Brown-lipped Snail)

A widespread and common species. It is found in a considerable range of habitats. Although frequently found with *Cepaea hortensis*, *C. nemoralis* is often more prevalent where drier, more open conditions prevail and will extend into areas with more base-poor soils.

Cepaea hortensis (White-lipped Snail)

Like the previous, this is a widespread and common species. It is found in a considerable range of generally moist habitats.

Cornu aspersum (Garden Snail)

Probably the most familiar snail species in Britain, the Garden Snail is thought to have been introduced by the Romans as a source of food. In the Parish, as elsewhere, it is commonly found in a wide range of semi-natural and man-made habitats, including gardens.

Helicigona lapicida lapicida (Lapidary Snail)

This species is preferentially associated with calcareous rocks, old quarries, old stone walls and woodlands. In the Parish it is recorded at several localities including Chudleigh Woods, Chudleigh Rocks and in the Kerswell area.

Family: *Hygromiidae*

Ashfordia granulata (Silky Snail)

In Britain it is a widespread but not common species associated with open damp habitats, especially where vegetation is lush. Unusually it has been recorded from Chudleigh Woods but could be encountered elsewhere where suitable conditions prevail.

Candidula intersecta (Wrinkled Snail)

A species of dry, open calcareous habitats. In Devon it is restricted to certain coastal areas and elsewhere with calcareous geology. In the Parish it is recorded from Chudleigh Woods, Chudleigh Rocks and very locally elsewhere where suitable conditions prevail.

Hygromia cinctella (Girdled Snail)

A species of Mediterranean origin, the first UK record was from Paignton in 1950 where it is thought to have been introduced with fruit and vegetables from France. It has since spread widely across mainly the southern half of England and Wales (and continues its march northwards!). It is associated with base-rich soils in gardens, waste ground and roadsides. In the Parish it was first recorded in a central Chudleigh garden in 1986 (where it can still be found) but it is now more widespread in suitable habitats.

Monacha cantiana (Kentish Snail)

A widespread and common snail species in southern and eastern Britain. It is particularly associated with more base-rich soils of hedgebanks, waste ground, road verges and open grassland areas.

Trochulus hispidus (Hairy Snail)

A widespread and common species, it is catholic in its habitat requirements. Within the Parish it shows a preference for well-vegetated habitats especially on base-rich soils.

Trochulus striolatus (Strawberry Snail)

A widespread and common species. It is frequently found in shaded sites such as woodlands and hedgebanks. It is also a synanthropic species, colonising waste ground, allotments and gardens, where it can be very common.

Zenobiella subrufescens (Brown Snail)

A species associated with undisturbed habitats, especially where moist conditions prevail in mature, sheltered broadleaved woodland. In Britain it has a strong western distribution and in the Parish it is recorded from Chudleigh Woods, but may well be found elsewhere.

Family: *Lauriidae*

Lauria cylindracea (Common Chrysalis Snail)

A nationally widespread and frequently very common species. It is particularly associated with grassland, old stone walls, rocky areas, hedgerows and woodlands.

Family: *Oxychilidae*

Aegopinella pura (Clear Glass Snail)

A nationally widespread snail species. In the Parish it is particularly associated with the damp conditions of leaf litter in broadleaved woodlands.

Aegopinella nitidula (Smooth Glass Snail)

A nationally widespread and common species. It is found in a wide range of damp or shaded conditions. In the Parish it is very commonly associated with woodlands, hedgerows, gardens and waste ground.

Nesovitreia hammonis (Rayed Glass Snail)

Nationally common and widespread it is found in leaf litter in a wide diversity of habitats including woodlands.

Oxychilus alliarius (Garlic Snail)

A nationally widespread and very common snail species found in a wide diversity of habitats including gardens and is tolerant of a wide range of soil nutrient levels including base-poor acidic conditions. Its English and Latin names alluding to garlic/*alliarius* is due to the often quite strong smell of garlic live specimens give off when handled.

Oxychilus cellarius (Cellar Snail)

A nationally widespread and common species, associated with damp conditions of woodlands, hedgebanks and gardens, particularly where more base-rich soil conditions prevail.

Oxychilus draparnaudi (Draparnaud's Glass Snail)

An introduced snail species, probably dating from the Roman period. It is widespread, preferring generally moist habitat conditions. In southern and south-west England it is found in woodlands, other natural habitats as well as gardens, whereas, elsewhere it is almost exclusively a synanthropic species, associated with man-made and urban habitats.

Oxychilus navarricus helveticus (Glossy Glass Snail)

A widespread, introduced snail species, it is primarily found across England and Wales, but it is more localised than the previous three *Oxychilus* species. In the Parish it is found associated with woodlands, gardens and disturbed ground.

Family: *Pristilomatidae*

Vitreia contracta (Milky Crystal Snail)

A nationally widespread and common species. Like the next species it is catholic in its habitat requirements though it generally favours drier conditions in deciduous woodlands and old stone walls. It is a very small species (max. 2.5mm).

Vitreia crystallina (Crystal Snail)

A nationally widespread and common species. It is generally catholic in its habitat requirements though it is more often associated with moister conditions.

Family: *Punctidae*

Punctum pygmaeum (Dwarf Snail)

This very small species (max. 1.5mm wide) is widespread and common throughout Britain. It is associated with leaf litter in woodlands and damp well-vegetated locations, avoiding disturbed sites.

Family: *Pupillidae*

Pupilla muscorum (Moss Chrysalis Snail)

A nationally widespread but only locally common species it is primarily found on calcareous substrates south of the Severn-Humber line. It shows a preference for grassland, open woodlands, scrub, old limestone workings and old limestone walls and has been recorded at a number of locations in the Parish where suitable conditions prevail.

Family: *Pyramidulidae*

Pyramidula pusilla (Rock Snail)

Within the Parish this small species (max. 3.0mm) is typically associated with exposed limestone rock faces and old limestone walls. This precise habitat requirement additionally reflects its national distribution.

Family: *Valloniidae*

Acanthinula aculeata (Prickly Snail)

A nationally widespread species most frequently associated with leaf litter in woodlands and hedgerows particularly where more base-rich soil conditions prevail. The shell of this small species (max. 2.2mm) is heavily ribbed with raised spines at the periphery of the whorls.

Family: *Vitrinidae*

Vitrina pellucida (Pellucid Glass Snail)

A common and widespread species of both base-rich or base-poor soils, moist or dry, open habitats as well as woodlands. It is widely found in the Parish. As its name suggests, it has a clear, light green, glass-like shell.

Slugs

Family: *Agriolimacidae*

Deroceras leave (Marsh Slug)

Thought to be the world's most widely distributed slug species! In the Parish it is found in damp disturbed habitats especially river banks and field margins.

Deroceras invadens (Tramp Slug)

First recorded in Cornwall in 1930 this introduced species is now widespread throughout much of Britain. It is associated with all synanthropic habitats.

Deroceras reticulatum (Netted Field Slug)

Widespread and probably the most abundant slug species in lowland Britain. It is found in a wide diversity of damp habitats. It is recognised as a serious pest species.

Family: *Arionidae*

Arion ater (Large Black Slug)

A very widespread species in Britain and can be found in most habitats. In the Parish it is found in gardens and allotments as well as road verges and woodlands.

Arion flagellus (Green-soled Slug)

Widespread and common in western Britain, particularly in Devon (although this may reflect survey effort!). In the Parish it is found in a wide range of habitats including woodlands.

Arion vulgaris (Vulgar Slug)

Formerly known as *Arion lusitanicus*, this introduced species is found scattered in Britain but has been found to be widespread in Devon (this may in part reflect survey effort!). It is associated with disturbed ground and within the Parish has been recorded from gardens, allotments and field margins.

Arion subfuscus (Dusky Slug)

A widespread and common species throughout most of Britain. In the Parish it is found in disturbed and semi-natural habitats.

Arion circumscriptus circumscriptus (Spotted False-keeled Slug)

The species is widespread throughout Britain. As elsewhere, within the Parish it is particularly associated with woodlands.

Arion circumscriptus silvaticus (Silver False-keeled Slug)

The species is widespread throughout Britain. As elsewhere, within the Parish it is particularly associated with woodlands and often found with the previous species.

Arion distinctus (Brown Soil Slug)

A common and widespread species throughout Britain. Within the Parish it is found in disturbed habitats including gardens, allotments and agricultural land as well as woodlands.

Arion hortensis (Blue-black Soil Slug)

The species has widespread but local distribution in southern and central England, but is scarce west into Wales and north of the Midlands. However, in Devon it has been found to be common and widespread (although this may reflect survey effort!). In the Parish it is found in a wide range of semi-natural habitats as well as gardens.

Arion intermedius (Hedgehog Slug)

The species is widespread and common in most semi-natural habitats and soil types in Britain. In the Parish it is a strongly associated with broadleaved woodlands.

Arion owenii (Tawny Soil Slug)

In Britain this species appears to be most widespread and common in Devon and Cornwall (this may reflect survey effort!), but only very patchily distributed elsewhere and absent from most of the country. As elsewhere in Devon, within the Parish it is found in a wide range of semi-natural habitats.

Family: *Boettgerillidae*

Boettgerilla pallens (Worm Slug)

Originating from the Caucasus and first recorded in Britain in 1972, the species has an uneven but widespread distribution in Britain, and is particularly prevalent in the south and west of the country. It was first recorded in Devon in 1988 and is associated primarily with disturbed habitats and agricultural land but also some woodlands. It is subterranean and in the Parish it has been recorded from Chudleigh Woods.

Family: *Limacidae*

Lehmanna marginata (Tree Slug)

A widespread species in Britain associated with woodlands, rock faces and old stone walls. These habitats, all found in the Parish, provide necessary surfaces upon which the species grazes lichens and algae as well as fungi.

Limax flavus (Yellow Cellar Slug)

Widespread but local, this large (can extend up to 130mm) introduced species is closely associated with human environments, particularly dwellings. It has been recorded from properties in central Chudleigh.

Limax cinereoniger (Ash-Black Slug)

One of our largest slugs (can extend up to 150mm) it has a widespread but local distribution in Britain. It is regarded as an indicator of old or ancient woodlands, but it is also found in replanted woodland sites, and appears tolerant of soil types. Within the Parish it has been recorded from Chudleigh Woods.

Limax maximus (Leopard Slug)

Our largest slug (can extend up to 160mm), it is widespread in Britain and preferentially associated with broadleaved woodland. In the Parish it is found in woodlands but also occurs in gardens. The species is noted for its mating ritual, a pair dangling from a branch and entwining on a mucus cord.

Family: *Milacidae*

Milax gagates (Smooth Jet Slug)

A widespread but local species in lowland Britain, it appears to be particularly concentrated in Devon (though this may well reflect survey effort!). A subterranean species, in the Parish it is associated with gardens, allotments and waste ground.

Tandonia budapestensis (Budapest Keeled Slug)

A synanthropic slug species, first recorded in Britain in 1930 having been introduced from eastern Europe and is now widespread and common. In the Parish it is commonly found in gardens, allotments and agricultural land. It is a noted pest species.

Tandonia sowerbyi (Sowerby's Keeled Slug)

A widespread and common synanthropic slug which is a noted pest species. It is found throughout Britain in both disturbed and semi-natural habitats and is commonly found in gardens and agricultural land.

Family: *Testacellidae*

Testacella scutulum (Orange Shelled Slug)

Of Mediterranean origin, it is a scarce species nationally but with a strong south-western distribution, especially in south Devon. It is one of three closely related slug species in Britain which retain a small, flattish, external, vestigial shell on the hind end, but which is too small to contain the animal. They are all subterranean (often located some 30cm below the surface) and carnivorous (emerging at night to feed on earthworms). Several were dug up in a central Chudleigh garden in 1989 and a few years later also in one of the Town's allotment plots.

Freshwater Snails

Family: *Tateidae*

Potamopyrgus antipodarum (Jenkin's Spire Snail)

Today a widespread species in Britain, it was introduced to this country from either Australia or New Zealand probably around 1859. It was initially known from brackish water sites in the Thames estuary but has since colonised most freshwater habitats. The first Devon record was made in 1892 at Exeter. It is a very small species rarely exceeding 5mm in height, reproducing both sexually and asexually (the great majority of populations have few or no ♂♂, only *parthenogenetic* ♀♀). The species is categorised as an *operculate* snail, the aperture of the shell closes with an *operculum* (a shell-like 'front door'). Within the Parish the species is recorded from the River Teign, Kate Brook, the Town Mill Leat and a number of streams.

Family: *Planorbidae*

Ancylus fluviatilis (River Limpet)

A very small cap-shaped freshwater limpet which is widespread and common in Britain. It is typically found on smooth-faced stones and rocks within watercourses, preferentially with fast-flowing, well-oxygenated water. Within the Parish the species is recorded from the River Teign, Kate Brook, Bramble Brook and several small streams.

Family: *Lymnaeidae*

Ampullaceana balthica (Wandering Pond Snail)

A widespread and common species throughout Britain including Devon. It is associated with a wide range of freshwater habitats. In the Parish several juvenile specimens were recorded from the River Teign by participants at a Chudleigh Wild river sampling session in July 2023.

Galba truncatula (Dwarf Pond Snail)

A widespread species throughout Britain including Devon. Within the Parish it is associated with damp areas in pastures, the margins of field ditches and damp woodland.

Omphiscola glabra (Slender Pond Snail or Mud Snail)

A rare and declining species in Britain (although it is recognised likely to be under-recorded). It is classified as a UK Red Data *Vulnerable* species and listed on section 41 of the 2006 Natural Environment and Rural Communities (NERC) Act as a *Priority species for conservation*. Populations tend to be very localised restricted by their particular habitat requirements. It is associated with nutrient-poor wetland areas, particularly where they become seasonally dry. It has been recorded from a number of sites in Devon, particularly within and around Dartmoor, extending into west and central Devon and a site in the South Hams. Within the Parish the species is identified from a seepage zone with Greater Tussock-sedge within open woodland in the upper reaches of the Kate Brook valley. It may well occur elsewhere around the peripheries of Haldon Hill where similar wetland conditions are found associated with the Upper Greensand spring-line zone.

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Species identification guides:

Cameron, R. (2003). *Land Snails in the British Isles*. Occasional Publication 79, FSC Publications, Shrewsbury.

Rowson, B., Turner, J., Anderson, R. & Symondson, B. (2014). *Slugs of Britain & Ireland*. FSC Publications, Telford.

Rowson, B., Powell, H., Willing, M., Dobson, M. & Shaw, H. (2021). *Freshwater Snails of Britain and Ireland*. Occasional Publication 192, FSC Publications, Telford.

All can be ordered on-line from the Field Studies Council (www.field-studies-council.org).
