Bittern Countryside

Community Interest Company

An Atlas and Guide to the Land Snails of the Arnside & Silverdale AONB

Supporting the **Arnside & Silverdale Area of Outstanding Natural Beauty**

Bittern Countryside Community Interest Company
Registered Office: The Old Station Building, Arnside, LA5 0HG
Registered number 6363720

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Produced with assistance from the Arnside & Silverdale AONB Sustainable Development Fund

Website:http://www.bitterncountrysidecic.org.uk

The Land Snails of the Arnside & Silverdale AONB

by Roger Spooner, February 2013

The local geology and the wide range of habitats give this area quite a variety of snails. This booklet shows some that you might expect to find: because of their size, because they are widely distributed or because they are present in large numbers.

Snails can be found on mild days for much of the year but look for them particularly on warm, damp, dull days, especially in the early morning. They are not all pests! Most of the woodland species feed on rotting vegetation, the fungi it contains and on the fungal fruiting bodies themselves (toadstools), so like earthworms they play an important role in recycling dead vegetation (and animals). Even the snails which eat living plants rarely eat a lot of one type – given a choice they will move from plant to plant.

Like us, snails come into the world much the same shape as the adult, simply getting larger with time, but patterns and markings can change. Most of our snails are hermaphrodite (have both male and female parts) but require another individual to breed. The eggs may hatch at any time but the young are most obvious in spring or early summer – the shells of young snails are delicate so handle with care and always replace them where you found them. There are usually plenty of empty shells around if you want a record. Slugs are often to be found under stones and logs but always replace the log or stone as well as the animal – other creatures may well be using it.

The maps are only to give you information on where I have found the snails. They are not widely recorded and can probably be found in many other monads, (one km squares). I have not given them for the very common snails. If you would like to add to the records, a photo together with the date, a grid reference, and site description should be sent to Ann Kitchen at knak@kenak.plus.com .

A good publication for snails with shells is "Land Snails in the British Isles" by Robert Cameron published by the Field Studies Council. It is probably best to look on the internet for slugs. A good site is that of the Conchological Society of Great Britain and Ireland at www.conchsoc.org.

Front cover photograph; *Cepaea nemoralis,* is by Rob Petley-Jones.
Habitat photographs on the back page are by Ann Kitchen.
All other photographs are by Roger Spooner unless otherwise stated.
Edited by Ann Kitchen.

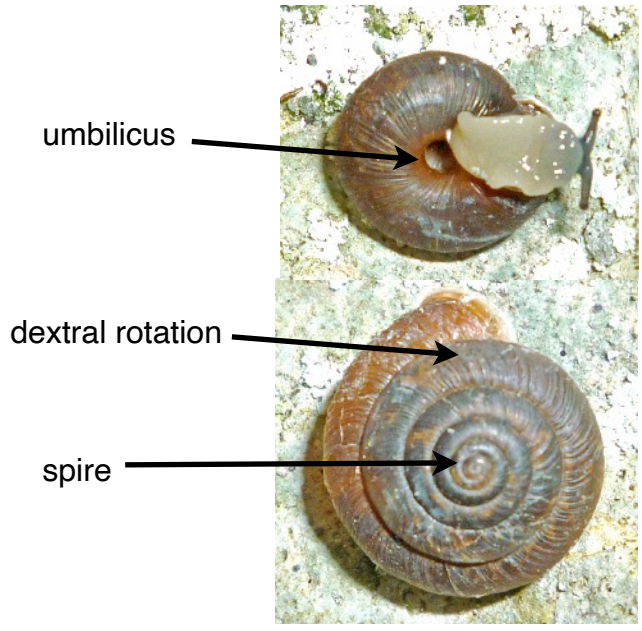
All profits from this publication will go towards recording and conserving the flora and fauna of the AONB.

The snails have been put into 3 categories.

Beachwood

SNAILS WITH SHELLS

To identify snails with an external shell you need an adult specimen (look for a lip at the opening, if no lip check that the shell has at least 3 or 4 whorls), you need to measure the height and width, you need to note the presence or absence of an umbilicus (an opening the shell coils round at the opposite end to the spire) and you need to note the direction of rotation of the shell – does it have a “right-hand” or “left-hand” thread. For practical puposes all our snails are dextrally rotated (right-hand thread) except the Clausiliidae family.



Cornu aspersum - Garden snail

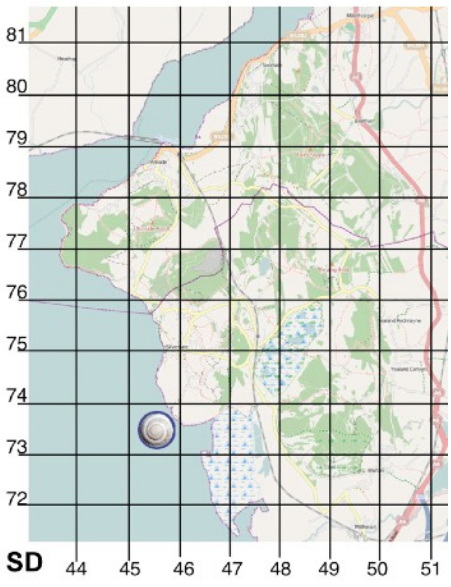
This is our largest snail and may reach up to 40mm in width and is roughly globular in shape. It has a characteristic wrinkled surface.

Although common in gardens it is widespread but is commonest in partly open habitats : hedgerows and open woodland.

Cepaea nemoralis - Brown lipped banded snail

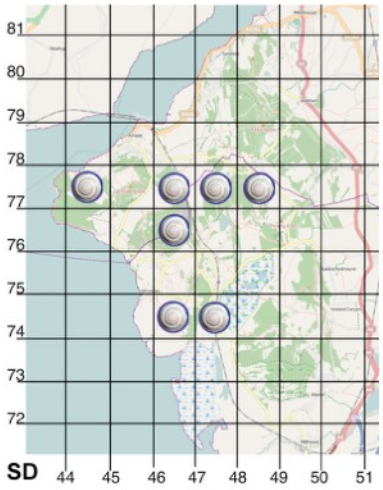
This often brightly marked snail may be found almost anywhere, from damp woodland to open sand dunes. The marking is highly variable and some individuals may have almost no banding at all. The background colour also varies from white to yellow and pink. The lip is usually brown but may not be.

An adult will be about 20-24mm wide. (If it has a lip it is an adult).



Cepaea hortensis - White lipped banded snail

This is distinguishable from *C. nemoralis* by its size (16-20mm wide) and the white lip. It is also highly variable in colour and banding. It is widespread but less likely to be found in sandy habitats.



Arianta arbustorum - Copse snail

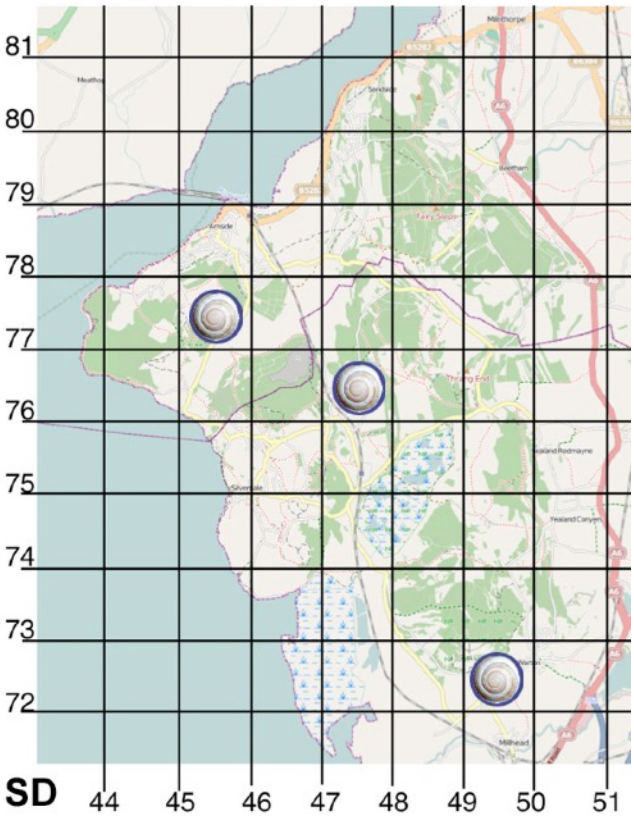
The Copse snail is often quite common in damp woodland but seems fairly rare in the AONB. It has been found in Fleagarth Wood SD4774. The shell is 18-20mm wide, of a mottled brown colour with a dark stripe and white lip. The umbilicus is just a tiny chink. The brown stripe may be missing.

Pomatias elegans

This is probably the most unusual snail in the AONB. It belongs to a different subclass from our other snails and has evolved from a different sea mollusc ancestor.

The shell is about 12mm in height and has a characteristic cross-hatched appearance. The shell is sealed by an operculum or lid, though this may be missing in old specimens.

This snail is found in loose friable soil often at the bottom of scree slopes. Look for it near Hawes Water, Arnside Knott and Warton Crag.



Trochulus striolatus - Strawberry snail

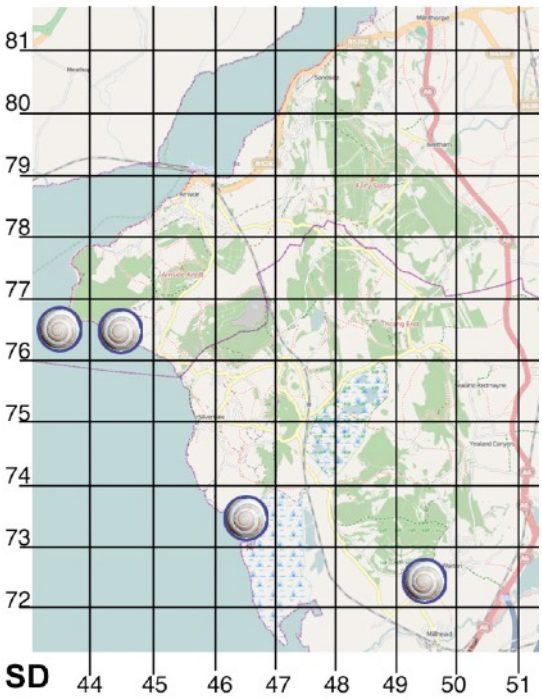
The Strawberry snail is about 12mm wide and is common throughout the area. It has a robust looking ridged shell and a very large umbilicus. In warm wet weather it will be found on most types of vegetation (not only strawberries).

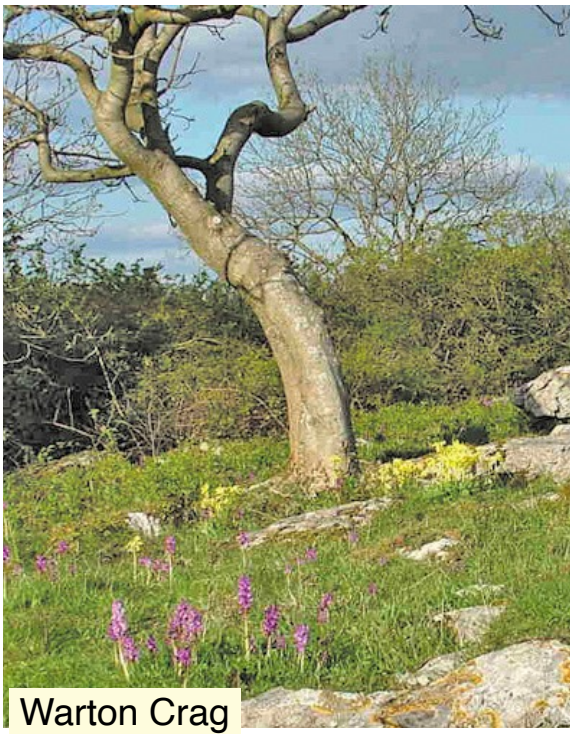
Trochulus hispidus

The most striking feature of this snail is that it is covered in small hairs. The shell is only 8-10mm wide so the hairs are difficult to see and they also often break off – though they are usually still visible in the large umbilicus. Note that the shell is fairly flat. Like *T. striolatus* it is widespread.

Candidula intersecta

This is another robust looking snail with a coarsely ribbed, slightly banded or blotched shell about 9mm in width and with a large umbilicus. It is found in dry sandy soil, particularly on the coastal margins but also on dry slopes such as Warton Crag.





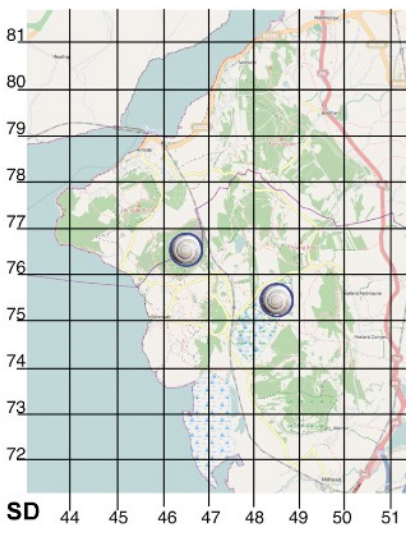
Warton Crag

Ashfordia granulata

Another hairy snail usually found in damp places which is about 9mm wide. It is distinguishable from *T. hispidus* by its more globular shape and its small partially occluded umbilicus. Recorded at SD4774.

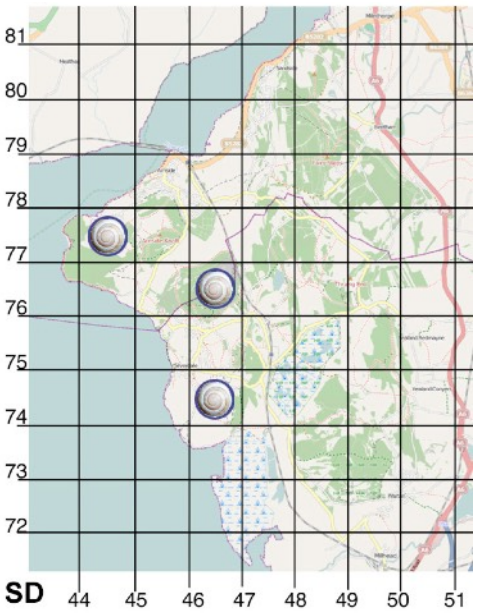
Succineid sp.

These snails are always found near fresh water and look rather like some pond snails. They are often to be found attached to Flag Iris leaves. They have relatively few whorls and a comparatively large opening. The commonest member of the family is *Oxyloma elegans* which usually has an amber colour.



Oxychilus alliarius - Garlic snail

Very common in damp woodland this snail is usually to be found among leaf litter, but in wet weather it is often found on tree trunks or rock surfaces. The animal has a striking blue-grey body and the shell is a very shiny, almost translucent, reddish brown colour. It is 6-8mm wide. (specimens more than 9mm wide will be the similar species *O. cellarius*). It is called the garlic snail because when irritated (try gently prodding it with a blade of grass) it gives off a distinct smell of garlic.

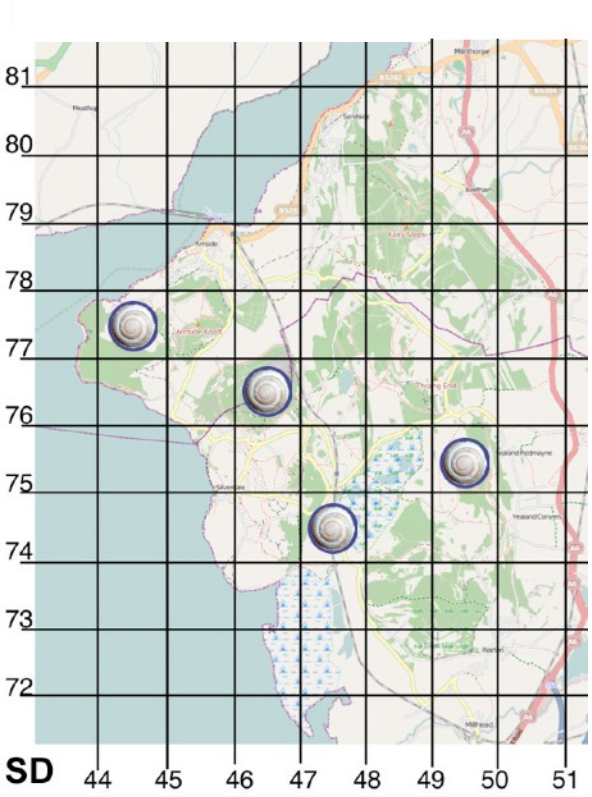


Pyramidula pusilla

This snail is very tiny, 3mm wide at most. It is a purple brown colour but soon weathers to a brownish grey, very difficult to see on the limestone rocks where it lives but it is often present in astonishingly large numbers. Look for it in the angle between two rock surfaces. It has been recorded at SD4676, SD4878 and SD4576.

Merdigera obscura

This animal is difficult to spot since it lives among leaf litter and attaches algae and debris to its sticky shell. However it is often found on tree trunks in wet weather. The shell is 9mm high and about 3.7mm wide with a distinctive white lip (just visible in the picture). Like all the other snails so far it is dextrally rotated – it has a “right-hand thread”. This distinguishes it from the species on pages 13 and 14 which are sinistrally rotated.



Snails with sinistral shells.

Vertigo angustior

This is a very rare snail found in the mosses of Gait Barrows Nature Reserve. It is only about 2mm high and about 1mm wide so extremely difficult to see, let alone find! It has a sinistral shell whereas all the other *Vertigo* species bar one are dextral.

Photo Rob Petley-Jones

Balea sp.

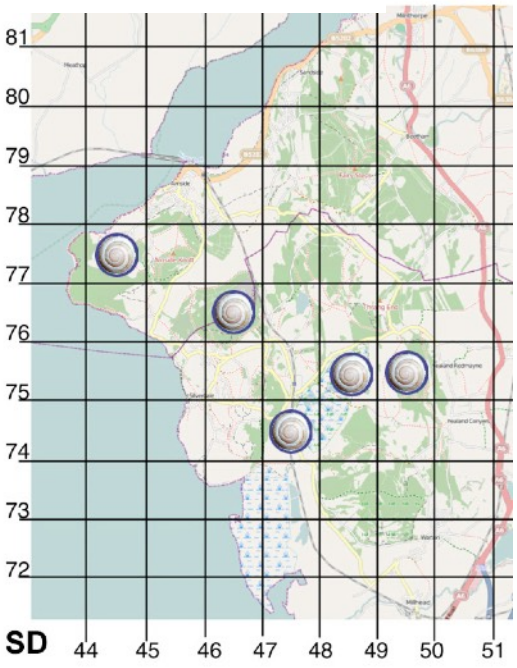
This snail has a shell very similar in appearance to that of *M. obscura* and is about the same height (9mm).

However it is sinistral – note that the opening is on the bottom left in the picture. There is no pronounced white lip and the shell is more delicate and “clean” in appearance.

It shares the same habitat and may also be found on trees in wet weather. It is recorded at SD4875.

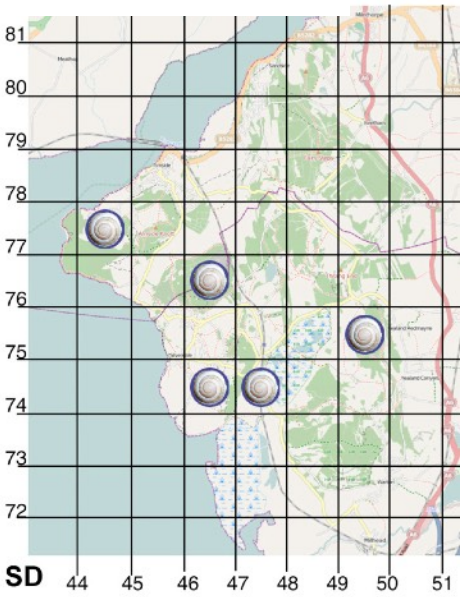
Cochlodina laminata

This is mainly a southern species but is found in woodland throughout the AONB. It is 14-17mm long and at 4mm wide appears quite plump. It is usually chestnut coloured and quite glossy but old specimens weather to a more dull grey, although glossy patches usually remain. Again look for it in leaf litter or on trees in wet weather.



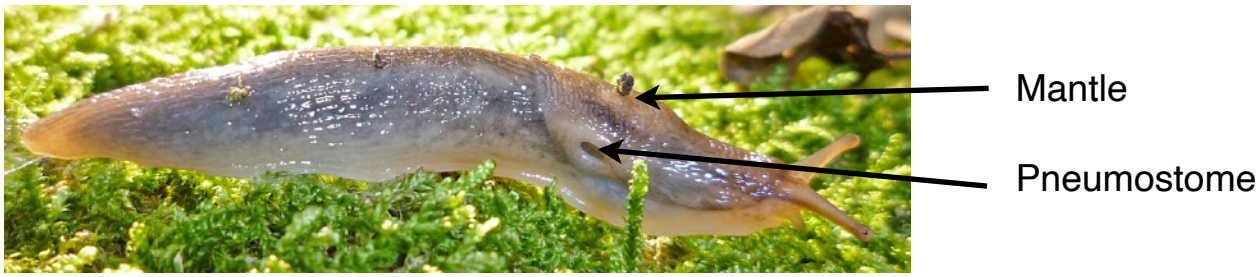
Clausilia bidentata

Similar in shape to *C. laminata* this snail is somewhat slimmer and shorter (about 11mm by 2.5mm). It usually has a grey weathered appearance and the ribs are clearly marked. Found throughout the AONB in woodland as above but also on rock surfaces and on drystone walls – often lurking under ivy leaves.



Jack Scout

SNAILS WITHOUT AN EXTERNAL SHELL (SLUGS)



Snails without an external shell (slugs) present their own problems of identification. Identification of slugs can prove difficult since there is no way of telling whether an individual is adult or not and size is important in identification. Look for the pneumostome, the opening on the right hand side of the mantle (the saddle shaped structure on the front half of the animal). If the opening is in the front half of the mantle it is a member of the *Arionidae* family. If it is in the rear half (as above) it is a member of the *Milacidae* or *Limacidae* families. Then look for a keel running the length of the back from mantle to tail. If there is one then it is a member of the *Milacidae* family. The *Limacidae* family have only a partial keel and the mantle is patterned with concentric rings like a thumb print (best seen in oblique light).

Arionidae family

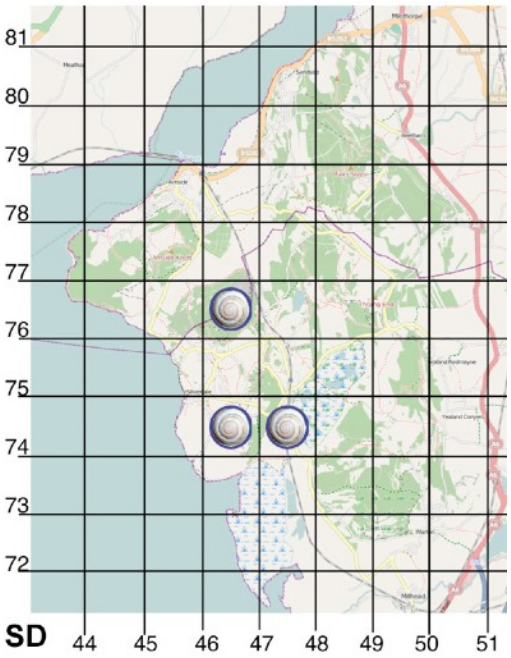
Arion ater

This is the most visible slug since it is large (up to 15mm), abundant and often active in daylight and sometimes even on dry days in bright sunlight in damp vegetation. It comes in a variety of colours ranging from

jet black through brown to an almost improbable orange. It often has an orange checked fringe (as shown) and has strongly marked tubercles on its back.

Arion silvaticus

This is common throughout the AONB, particularly, as its name suggests, in woodland. It is about 3-4cm in length of a silvery grey colour with a dark stripe running the length of the body including the mantle. They are frequently to be seen in damp weather descending trees early in the morning.



Arion fasciatus

This is 4-5cm in length with a dark stripe but is of a somewhat brownish colour suffused with orange below the stripe. Widespread in most habitats including gardens.

Milacidae family

Tandonia budapestensis

This is 5-6cm in length and quite slender when extended. The long keel is often yellowish or orange (but not always as obvious as in the picture). The body is a mottled grey and there is usually a dark central band to the sole. When threatened the animal curls into a 'C' shape – as in the picture. It is widespread, partly subterranean and regarded as something of a pest.


Tandonia sowerbyi

This slug is 6-7.5cm long and somewhat stockier than *T. budapestensis* with similar markings but an unstriped sole and adopts a hemispherical shape when threatened (see below right). It is also widespread.


Limacidae family

Limax marginatus - Tree slug

7-8cm long, this is a mainly woodland species often seen descending trees in damp weather, sometimes in large numbers. Like many slugs they are largely nocturnal and they feed on the algae and fungi growing on the trees. They have vaguely longitudinal markings (not usually clear stripes) and the short tail keel is visible in the picture below right. In wet weather they absorb water and have a strange gelatinous translucent appearance (below left).

Limax flavus

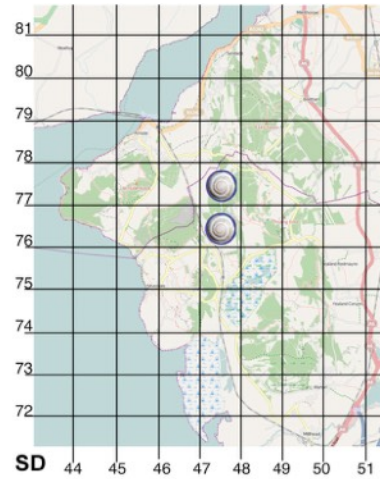
This animal seems to like us since it is usually closely associated with our buildings, found in compost heaps and gardens and coming into cellars and other damp places. 7.5-10cm long and of a grey/brown/yellow mottled appearance it has characteristic blue tentacles.

Deroceras reticulatum

This is about 3.5-5cm in length, very varied in colouration, usually a blotched oatmeal colour. Probably the most common garden slug (and the most disliked) but widespread in other habitats.

Limax cinereoniger - Ashy-black slug

This is our largest slug (10-20cm) and is quite thin when fully extended. It has a keel, usually of a different colour, which extends about two thirds of the body from mantle to tail (visible below right). The most striking feature in adults is that the sole has a central white stripe with black edges. It is becoming increasingly rare as it prefers ancient, undisturbed woodland and is often used as a marker species for that reason. Found in the Hawes Water Gait Barrows area.



Eaves Wood

View from Arnside Knott

Hale Moss

Trowbarrow

Jenny Brown's Point