

The first thing to look for when scoring snails is the colour of the shell itself. Ignore any bands there may be on the shell. The basic division we want you to make is whether the shell is yellow, pink or brown.



This can be tricky for some specimens as colours can vary in intensity and often fades in dead, empty shells. The colour is enhanced, and slightly altered by the periostracum, the shiny, almost varnish-like outer layer on the outside of a fresh shell. It is made of material very similar to your fingernails! This gradually peels off empty shells, and may get lost even in living snails, especially if they have lived a long time, or if they are in a habitat where there is a lot of abrasion (snails living in sand dunes get literally sand-blasted).



If the shell appears white even with its periostracum intact, score it as yellow. If you have an empty shell without a periostracum, moisten it a bit and the colour should show. If you can see no colour in such a shell, discard it; it may have faded too much to be useful.

Scoring pink and brown shells

The distinction between pink and brown can be harder. "Pink" is often a bit of a misnomer, especially in banded shells, and the shade and intensity vary quite a lot.



Browns can be dark or pale. When you come across dark brown shells, there is no problem in identifying their colour.



When brown shells lose their periostracum they have a purplish tinge, whereas pink shells show a very pale pink tinge.

Both pink and brown shells can be yellow at the apex, so make your decision on the lower half of the shell. The shell colour is often fainter in shells with bands, especially those with many bands.

Only score a shell as brown if you are absolutely sure about it. Score the rest as pink. If you think your sample may have pale browns in it, but you are not sure, tick the brown box on the record sheet. For many purposes we will compare only the proportions of yellow and "not yellow" shells.

Pale brown, unbanded shells are quite common in *Cepaea hortensis*. If you are dealing with this species, you may find the distinction from pink straightforward.

Scoring yellow shells

In general, you should find it relatively easy to decide whether your shell is yellow or not. In general, the underside of the shell is the most reliable place to look.



The next thing to look for when scoring snails is the number and position of the bands. We want you, for each shell colour separately, to split the shells into unbanded, one banded and many-banded.



Scoring unbanded shells

A shell is unbanded if there is no trace of any bands at all. In some shells the bands are transparent, but are still visible (this is called the hyalozonate condition). Score these as banded.



Sometimes, bands are very reduced, to the point of being just little dark blobs behind the mouth. Look carefully there; if there are traces of bands, score it as banded. Look at the picture of many banded shells.

Note: There are some places, especially on sand dunes, where you may find unbanded shells with a slight purple flush behind the mouth, not forming a band. These would normally be scored as unbanded

Scoring banded shells

A shell is one banded if it has a single band roughly in the middle of each whorl. Sometimes there may be a wider smudge of band pigment behind the mouth, but if there is only one band continuing round the whorls, score it as one banded.



Sometimes, also, there may be very faint traces of bands above and below the big central one (this is called "satellite bands"). Again, score such shells as one banded.

Note: One banded shells are rather rare in *Cepaea hortensis*. If you find a white-lipped one banded shell, check your identification with particular care.

Scoring many banded shells

A shell is many banded if it has more than one band, or if there is only one band visible and it is near the top or the bottom of each whorl. Shells with only one band other than the one in the middle are rare.

The bands may be fused together to make wider bands or they may be connected in a rather smudgy way as though the pigment had leaked. Often, one or more bands are missing, or much weaker than the others. Remember that they may not be pigmented (the hyalozonate condition mentioned previously).



Note: the basic pattern in "many banded" shells is of five distinct bands. Very rarely, some of these may split. Because there are so many minor variations on this theme, and their heredity is not always known, we have called them all many banded