The Girdled Snail Hygromia cinctella in Scotland Adrian Sumner

The Girdled Snail, *Hygromia cinctella*, is a Mediterranean species that was first reported in Britain in 1950. Comfort (1950) found this snail at two localities in Paignton, Devon, on cultivated ground with exotic plants. In fact, *H. cinctella* turned out to have been in the area since at least 1945 (Milman, 1951), and Comfort (1951) found it was widely distributed around Paignton. For many years *H. cinctella* was restricted to South Devon, but in the 1980s and 1990s it began to expand its range, moving north and eastwards, as well as westwards into Cornwall. By 2006, it had reached Leeds, in Yorkshire (Norris, 2006). It then made a great leap northwards, turning up in Glasgow in 2008, where Richard Weddle found it in Partickhill, on the west side of the city (grid ref. NS553671) (Weddle, 2009). A single specimen of *H. cinctella* was found among several collected from Japanese Knotweed. This remained the only Scottish record for a few years, until I found Girdled Snails in Livingston, West Lothian (NT036683); Edinburgh (NT228738); and St Andrews, Fife (NO516612), in 2012. Subsequent records have been from Uddingston (NS688607), on the south side of Glasgow, in 2014, and from Dunbar, East Lothian (NT678774), in 2015. This species is now well established at many sites in the City of Edinburgh.



Fig 1. Two specimens of *Hygromia cinctella* from St Andrews, showing the typical shell colour and shape.

this species. The colour of the shells and animals is variable. The specimens I found at St Andrews conform very well to Comfort's description (Fig. 1); the shade of brown is quite distinctive, and I cannot think of any other snail that is quite the same colour. However, most of the Girdled Snails I've found in Scotland have thinner shells, with the body colour tending to show through; they are either dark brown (Fig. 2), or whitish (Fig. 3).

In my experience, dark-shelled snails also have dark bodies, and pale-shelled individuals have pale bodies. Whether this correlation is universal remains to be seen. As can be seen from Figs 2 & 3, the whitish peripheral band is not always

Comfort (1950)originally described Hygromia cinctella as ". . . conical, reddish brown or horncoloured with sharp peripheral keel, with a thin opaque white band coincident with the keel". This is a pretty clear description of this species, but as will be seen, it needs some qualification. He later added that some adults reach a diameter of almost 20 mm (Comfort, 1951), but the largest one I have found in Scotland is only 11.3 mm in diameter, and most are under 10 mm. conical appearance of the upper side of the shell, the sharp peripheral keel, and the rounded underside, are characteristic of



Fig. 2 Dark-shelled specimen of *Hygromia cinctella* from Edinburgh, with a dark body

continuous, and does not always extend to the mouth of the shell. Some specimens have very fragile shells, even so thin that they crumble when picked up; Girdled Snails may be very sensitive to a lack of lime in many parts of Scotland, and this might restrict their potential distribution.

The only species that *Hygromia cinctella* might possibly be confused with is the Strawberry Snail *Trochulus striolatus*, which lives in the same sort of habitats.

T. striolatus has a shouldered shell, often more obvious in juveniles, but never an actual keel, and it has quite a large umbilicus; the umbilicus in *H. cinctella* is small, and largely covered over by the edge of the shell so that it is not really visible (Fig. 4). *T. striolatus* often has a faint peripheral band on the shell, but this is never as sharply defined as that on *H. cinctella*.



Fig. 3 Pale-shelled specimen of *Hygromia* cinctella from Edinburgh, with a pale body

Where does the Girdled Snail live? All the sites where I have found H. cinctella so far have been ruderal; in Edinburgh it favours rough vegetation beside the old railway lines, now cycle paths and footpaths, that criss-cross the city, but anywhere in a built-up area with, for example, nettles and similar vegetation seems to be suitable. The sites at Livingston and Dunbar were both just outside garden fences, suggesting that the snails may have originated in gardens. This was especially obvious at Dunbar, where the snails were just outside the back garden fences of some newly built houses, and associated with discarded pots and plant trays. H. cinctella also climbs walls, and can be found underneath boards lying on the ground, as at St. Andrews.

It will be interesting to follow the spread of the Girdled Snail in Scotland, to see if it is restricted to areas relatively rich in lime (like many built-up areas), or whether it can establish itself anywhere. Although the Girdled Snail has become established in Edinburgh, why has there been only one record of it in the Glasgow area since 2008? Has it failed to establish itself there, or is it simply that it hasn't been searched for thoroughly? So far, with the exception of the St Andrews record, all the finds have been in the Central Belt, but this could just be observational bias: if H. cinctella has been brought to Edinburgh and Glasgow, there seems to be no reason why it should not be introduced into other towns and cities in Scotland. The rapid spread of this snail northwards through England, and now into



Fig. 4 Comparison of *Hygromia cinctella* (left) and *Trochulus striolatus* (right). Top: frontal views, showing the keeled shape of *H. cinctella* compared with the rounded, shouldered outline *T. striolatus*. Bottom: the umbilicus of the two species, almost closed in *H. cinctella*, and large and open in *T. striolatus*.

Scotland, could almost certainly only have happened with, no doubt unwitting, human assistance; sites with newly established gardens, where plants have been brought in from elsewhere, should be particularly profitable when looking for this snail.

Identification of *Hygromia cinctella* is really quite straightforward, but if you have any doubts, please do not hesitate to contact me at adriantsumner@btinternet.com (though I cannot promise a prompt answer during the season – I might be out looking for snails, too!). Two or three photos from different angles should be sufficient.

References

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