Carved snail

Jean Grace creates a carved snail in her first project

Having been a member of the Sussex Woodcraft Society for a couple of years with my woodturner husband Chris, I thought I would like to have a go at carving. What would the inspiration be? I had received a bronze snail as a present some time ago and thought that would be an interesting project; little did I know what was ahead. Chris suggested I make him fairly large so that it would be easier to carve. I examined the snail carefully and measured my selected blank, which was about four times his size, so scaling up for the drawing was relatively easy. Just when I had finished the paper drawing, somehow it came as a surprise to me that I had to do it all over again on the wood block and from several directions!

You will need...

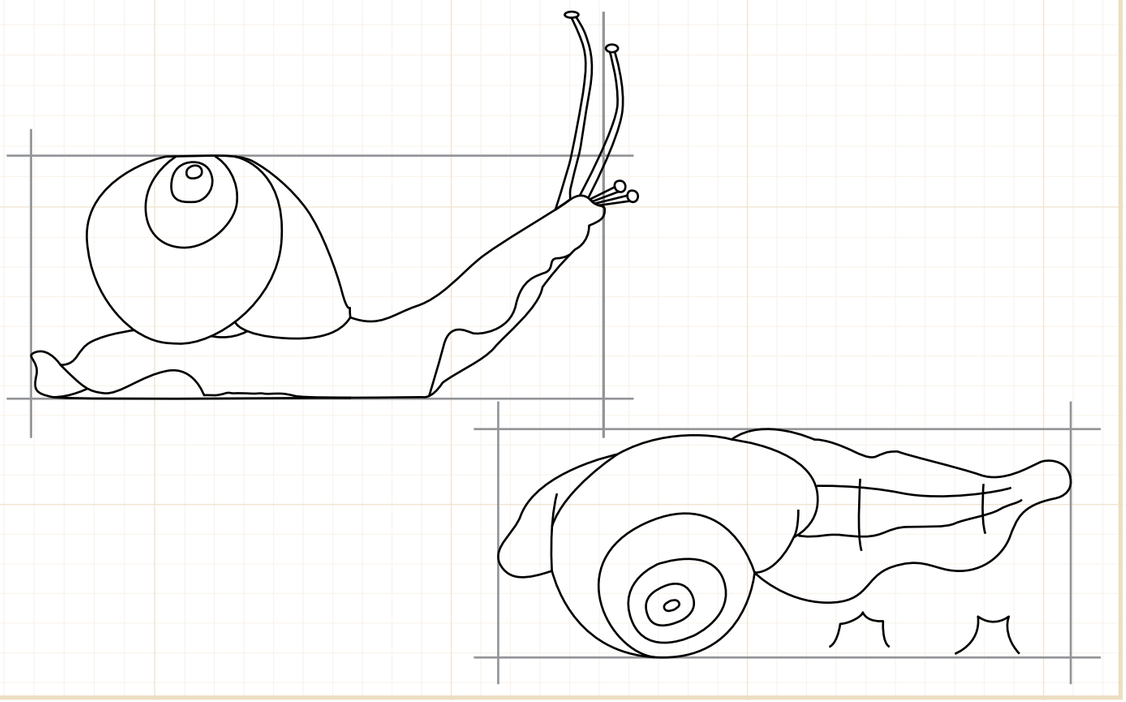
Tools:
Bandsaw
Coping saw
Pullsaw
A selection of carving gouges
Foredom flexi-shaft machine
Kutzall 19mm carbide burr
Mallet
Abrasives – Micromesh from P120-P800
Carving clamp
Cut resistant glove
Optivisor
In hindsight, proportional callipers would have been a great help

Wood:
Block of lime (Tilia vulgaris) *measuring 270 × 150 × 100mm*

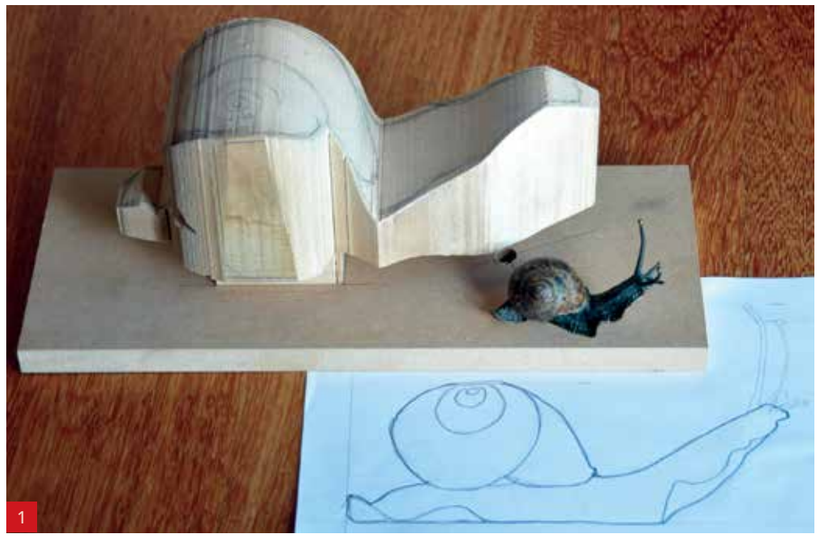
PHOTOGRAPHS BY CHRIS GRACE

ABOUT THE AUTHOR

Jean Grace is a member of the Sussex Woodcraft Society. This, her first project 'Brian', won her first prize in the society's annual competition within the 'beginner' category.



1 The first step is to cut out the blank. As this was my first project and as I had never used a bandsaw before – and was rather nervous of it – I accepted my husband's offer to cut it out. I then mounted the embryonic snail on a protective piece of MDF shown here with the small bronze and the initial scaled up drawing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2 Next is the roughing out stage. Initially, I found this part daunting, but it turned out to be good fun with the shape improving all of the time – though I was nervous about potentially bashing off a bit that I would need later! For this step, use a shallow gouge and a small one piece mallet to do the roughing out


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3 As all of the original drawing should have disappeared at this stage, redraw it on again, but this time on a 3D surface. It acts as a guide to help you see what you should cut away next, or more importantly what you should leave until later. As you progress, try to cut away under the shell. This should reveal its true outline


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Top tips

1. If there is a chance of overshooting with your gouge onto the dining room table or metal carving clamp, secure your work to a sacrificial barrier


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4 Continue to shape the shell and then draw on the spiral pattern you need

5 Then, follow the line you have drawn on, using a 'V'-tool to gradually start to reveal the spiral of the shell

6 Refine the shape further and as the shape of the shell becomes more refined...

7 ... you can switch to using a smaller gouge. I realised I liked the texture of the small tool marks on my snail, so decided to keep them in the finished carving

8 Having gone as far as you can with the shell of the snail, move onto working on his back. First, draw a centreline ridge, then move onto the top of his back and finally, the position of the skirt. Now you should be able to start shaping his back


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"I realised I liked the texture of the small tool marks on my snail..."


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9 One of the most useful devices that will help you access all areas of the carving is a Hydraclamp carving vice, which once locked, is extremely solid. Being able to quickly place the carving at the correct angle so that you can see and access the area you are working on makes life much easier. Once you have finished the top, all that's left is his 'face', which I personally just couldn't visualise

10 As I found it hard to visualise the face, I switched to making him some tentacles instead. I was given a small amount of bone and found it hard to carve, so I used a belt sander. This was almost too quick, but I soon got the hang of quickly turning the tentacle as I shaped it


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11 The snail needs eyes on the end of each tentacle, which you can shape by hand or with power tools. Once shaped, sand the bone using all the grits up to 800. I had sufficient bone to be able to do the tentacles in pairs back to back, so I held one while shaping its pair. So as not to damage the tentacle an MDF block was made with a hole and slit to hold them and as a guide while carefully cutting them square

12 The same jig can be used to hold the tentacles in a vice, where you are able to drill a small hole for a magnet to attach them to his head. Use some small neodymium magnets – 3mm diameter – to secure the tentacles to the head. As they will be vulnerable you can then use the file to create small flats on the snail's head where the tentacles will sit so that you can carve up to and around them

13 The magnets can come in handy for visualising the correct position and angle. You can hold them on a small file against the flats created, before progressing to the next stage

14 Drilling perpendicular to the flats is easy with a Hydraclamp or tiltable table, as it enables you to position the snail exactly at the right angle in all directions for the delicate drilling operation. I recommend you drill a test hole in a piece of scrap to ensure the magnets will be a tight fit

15 The magnets are so small and slippery that, after dropping several times, I found the easiest method – and one that would ensure I got them the right way round. Stick one magnet to the tentacle and use that to press them into the snail's head

16 You may have to use a hammer and small punch to push the magnets firmly home. Now you can finally finish the 'face'

17 Next, you need to saw off the chin, making sure to look from both sides, so as not to cut any more off than needed

18 Cut the snail loose from the mounting block with a pullsaw; this allows access to the underside

19 You can then begin carving the foot


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Top tips

2. Good lighting is essential: on my drill press there are two lights; this makes it easy to line up the two shadows of the drill on the exact point on the work where you want the hole
3. For viewing fine detail, using some form of magnification may help. My Optivisor is comfortable and allows me to use both hands


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20 Using a 19mm diameter, fine Kutzall burr in a Foredom flexible drive handpiece, you can literally erase the wood you don't need. However, it's a dusty process and you will need a form of extraction

21 By now the skirt is quickly starting to take shape and you are able to create the undulations you want to make the snail come alive

22 After some further hand carving, when you are happy with the overall shape...

"By now the skirt is quickly starting to take shape..."

23 ... you can start the process of smoothing off with a flatter gouge. Finish off the entire foot with Micromesh abrasives up to 800 grit

24 For me, the snail's bone tentacles turned out to be a very light colour compared to the body, so I dyed them with a solvent-based wood dye, which allowed me to tone them down. The best technique seemed to be to put some on and quickly wipe it off. Finally, give the snail a coat of sanding sealer followed by a buff with microcrystalline wax; this leaves the texture on the shell, which helps to represent the mottled colour of snail shells and also gives the body a soft sheen

25 The final piece should look something like this


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Top tips

4. It makes life so much easier if the carving is firmly clamped to a stable base
5. Using a coping saw and regularly looking at lines on both sides of the carving enables you to steer the blade through the irregular shape
6. A gutter drain hopper makes a great chute for a 100mm extractor hose to catch as much dust as possible
7. If you don't have the correct shade of dye, just thin it down and build up the colour to the desired shade
8. Leave the wood under the snail's chin; this will provide support to the vulnerable head while working with a chisel and mallet