## 6. COFFIN MANUFACTURE

## Anne Crone

The species of $28 \%$ of the coffin components have been identified as Scots pine (Pinus sylvestris); all of the other components were coniferous so it is assumed that they were all Scots pine too. All the coffins have been manufactured from mill-sawn boards; saw-marks lying at right-angles to the edges are visible on many of them. Their construction appears to have followed a standard design, so the three most complete coffins, C142, C374 and C398, have been recorded in detail as representative of this design (Table 2).

### 6.1 Coffin C142

The surviving components of Coffin C142 consist of both side boards, head and foot boards, eight slats from the base, and the lid. The coffin was 1.98 m long and was 0.22 m high at the feet, increasing to 0.28 m at a point 0.28 m from the head. At this point the bases of the side boards had been cut at a sloping angle so that the height at the head end of the coffin is reduced to $c 0.20 \mathrm{~m}$. Presumably, this angled base provided support for the head.

The base slats were on average 0.26 m in length (measured along the length of coffin), except for Base 8 which was only 90 mm long. They narrowed in width from 0.63 m at the head to 0.37 m at the foot. Many of them were tapered in width from one edge to the other, the sides shaped quite irregularly; this is most pronounced on Base 6, one side of which has been roughly chopped to shape with an axe (Illus 7.1).

Some of the base slats have shallow, narrow bevels on the external faces of the outer edges, pierced by a pair of nail-holes; others, however, display no shaping of the outer edges at all, and there are no nail-holes visible on Base 1. Presumably, the bevelling was done to reduce the width of the board at the point where it was going to be nailed to the side boards.

The head board is $0.53-0.57 \mathrm{~m}$ wide so it must have been nailed onto the surface of Base 1, which is 60 mm wide. However, it is too decayed to see any fixings. Nail-holes are visible on one edge of the foot board so the sides must have been nailed on either side of the foot board. The tops of both the head board and foot board are decayed so the
original shape cannot be determined. Most of the original length of the lid survives but only 0.28 m of the width survives. It has been fashioned from a board only 10 mm thick so it is possible that it was made up of several boards, only one of which has survived. The boards in this coffin are quite variable in their thickness, from 30 mm for the head and foot ends, to only 9 mm for some of the base slats.

### 6.2 Coffin C374

This was the best-preserved of the coffins. The surviving components consist of both side boards, head and foot boards, and nine slats from the base, as well as three fragments of the lid. The overall length of the coffin was 2.07 m by 0.27 m high at the feet increasing to 0.29 m from the head end. From this point the bases of the side boards had been cut at a sloping angle, as had been done in Coffin C142, so that the height at the very end of the coffin had reduced to 0.20 m .
The base slats were on average 0.245 m in length and narrowed in width from 0.54 m at the head to 0.35 m at the feet. They were rectangular, unlike those in the other two coffins. They are between 20 mm and 30 mm in thickness, except for Base 9 , which is very different from all the other base plates in that it is only 98 mm in length and 11 mm thick; it has a single axe facet at one end and looks very like a small barrel stave that has been reused in the coffin.

The ends of the side boards had been bevelled on their external faces and so had the outer edges of each of the basal slats. The bevelled edges had been axe-dressed, often leaving the bevel with a wavy edge (Illus 7.2). All of the bevelled edges were pierced by a pair of nail-holes roughly placed towards the end of each edge, with corresponding nail-holes irregularly placed along the basal edge of each side board. Both ends had single nail-holes in each edge approximately 0.08 m above the base.

Both the head board and foot board were houseshaped, ie with a central peak, so the coffin would have had a central ridge along its length. Only fragments of the coffin lid survived and none of these retained original edges so it is not possible to determine whether it had been fashioned from one or more boards of pine, but the peaked shape of the end boards suggests that it would have been a composite lid. The fragments were very thin, 7 mm

Table 2 Measurements of coffin components

| Context | Component | Length (m) | Width (cm) | Thickness (mm) | Height (cm) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 142 | N side | 1.98 | 1 | 30 | 28 |
| 142 | S side | 1.97 | 1 | 30 | 23 |
| 142 | Head end | 1 | 53-57 | 22 | $15+$ |
| 142 | Foot end | 1 | 29 | 25 | 24 |
| 142 | Base 1 | 27 | 59-63 | 22 |  |
| 142 | Base 2 | 24 | 58 | 22 |  |
| 142 | Base 3 | 24 | 53-56 | 19 |  |
| 142 | Base 4 | 27 | 49-53 | 20 |  |
| 142 | Base 5 | 26 | 45-47.5 | 9 |  |
| 142 | Base 6 | 28 | 40-44.5 | 9 |  |
| 142 | Base 7 | 28 | 36-40 | 11 |  |
| 142 | Base 8 | 9 | 37 | 30 |  |
| 142 | Lid | 1.98 | $28+$ | 10 |  |
| 374 | N side | 2.07 | 1 | 35 | 21 |
| 374 | S side | 2.06 | 1 | 20 | 21 |
| 374 | Head end | 1 | 48.7 | 30 | 29 |
| 374 | Foot end | 1 | 29.5 | 30 | 27 |
| 374 | Base 1 | 26 | 54 | 20 |  |
| 374 | Base 2 | 25 | 51.5 | 20 |  |
| 374 | Base 3 | 26 | 50 | 25 |  |
| 374 | Base 4 | 26 | 45 | 21 |  |
| 374 | Base 5 | 26 | 47.5 | 20 |  |
| 374 | Base 6 | 22 | 43.5 | 22 |  |
| 374 | Base 7 | 24 | 41 | 30 |  |
| 374 | Base 8 | 21.5 | 37 | 24 |  |
| 374 | Base 9 | 9.8 | 35 | 11 |  |
| 398 | Right side | 2.08 | 1 | 26 | 26 |
| 398 | Left side |  | 1 | 23 | 24 |
| 398 | Head board a | 1 | 54 | 21 | 7 |
| 398 | Head board b | 1 | 52.5 | 25 | 21 |
| 398 | Foot board | 1 | 29-30.5 | 25 | 25.2 |
| 398 | Base 1 | 28 | 57-59 | 10 |  |
| 398 | Base 2 | 28 | 54-56 | 11 |  |
| 398 | Base 3 | 27.5 | 51 | 15 |  |
| 398 | Base 4 | 26 | 47-50 | 10 |  |
| 398 | Base 5 | 25 | 43-46 | 11 |  |
| 398 | Base 6 | 25 | 41.5-43 | 10 |  |
| 398 | Base 7 | 25 | 38.5-41 | 11 |  |
| 398 | Base 8 | 23 | 36-38.5 | 11 |  |



Illus 7 Coffin manufacture: 1) C142, Base 6; 2) C374, Base 7; 3) C398, foot board © Wardell Armstrong LLP
on average. Some of the fragments appeared to be curved along one edge; this could have formed a lip over the coffin but the alignment of the ringpattern suggests that this curvature had occurred as the wood decomposed.

### 6.3 Coffin C398

The surviving components of this coffin consist of both side boards, head and foot boards, and eight slats from the base. The lid has not survived. The coffin was 2.08 m long and the base slats narrow from 0.59 m at the head end to 0.36 m at the foot end. The base slats are all flat, without the bevels seen on the other coffins, and all are pierced along either side by a pair of nail-holes. They all taper slightly along their length to form the classic coffin shape, and they reduce in length from 0.28 m at the head to 0.23 m at the foot.

The foot board is the most complete surviving example (Illus 7.3). It is 0.25 m high, with a domed top and sides which slope gently to the top. The head board consists of two components but there is no indication as to how they were fixed together. A single nail-hole in the bottom edge of the lower head board corresponding to a single nail-hole in Base 1 indicates that this is how these two components were fixed together. Together the head board would have been 0.28 m in height. The tops of the side boards are decayed so their original height is incomplete. They both have wide bevels at either end. They do not display the sloping base at the head end seen on the other two coffins.

The position of the nail-holes along the edges of the components indicates that the head and foot boards were nailed to the inner faces of the side boards, so that they were contained within the side boards, and then the base slats were nailed onto the edges of the side boards. Each base slat was secured by two nails, although the positioning was often quite
irregular, while the head and foot boards appear to have been secured to the base slats by a single centrally placed nail, and to the side boards by a single nail positioned just above the base. There may have been other nail-holes which have disappeared with the decayed wood. Relatively thick boards, between 23 mm and 26 mm thick, were used for the four sides of the coffin, while the base slats were much thinner, between 10 mm and 11 mm thick.

### 6.4 Summary

The three coffins described above conform to a standard design and all vary very little in size (Table 3). However, there are other noticeable variations between them. There are differences in the way they were manufactured; rectangular, straight-sided slats were used for the base of Coffin C374, while they were neatly tapered in Coffin C142. The edges of the boards were not bevelled in Coffin C142 while there were pronounced bevels on the components of Coffin C374. This may relate to the fact that the boards used in Coffin C374 were much thicker and so it was necessary to reduce the thickness of the board at the joint. Differences in the design of the coffin lid are also intimated; the end boards of Coffin C374 were peaked, while the foot board of Coffin C398 was domed.

The other coffin components were scanned for further evidence of manufacture. On the whole, they conformed to the same general design observed in the three coffins described above: single boards for the long sides and multiple short slats for the bases. The thin boards used in the base of Coffin C398 were also observed in other coffins, ie Coffins C240 and C394, while others had the thicker boards used in Coffin C374, ie Coffins C457, C489 and C524, although only a few basal slats survived in these examples.

The composite head board seen in Coffin C398 was also observed in Coffin C240. In this example

Table 3 Overall dimensions of the coffins

| Coffin | Length $(\mathrm{m})$ | Height $(\mathrm{cm})$ | Width $(\mathrm{cm})$ | AV basal slat thickness (mm) |
| :--- | :---: | :---: | :---: | :---: |
| 142 | 1.98 | $22-28$ | $37-63$ | mixed |
| 374 | 2.07 | $21-25$ | $35-54$ | 22 |
| 398 | 2.08 | $25-28$ | $36-57$ | 11 |

the two pieces had been clearly dowelled together with conifer dowels 11 mm in diameter set towards the outer ends of the board.

In general, the coffins look to have been quickly assembled; the side boards were nailed to the outer edges of the head and foot boards and then the base slats were nailed across the coffin onto the bottom edges of the side boards. No nails survived but the
best surviving holes indicate the use of rectangular nails, $3 \times 4 \mathrm{~mm}$ across. The coffins appear to have been plain and unembellished; no evidence of decoration or fixings for coverings to the coffins was observed. That the coffins were assembled quickly suggests the community were manufacturing coffins as quickly as possible in order to cope with a large number of fatalities in a short space of time.

