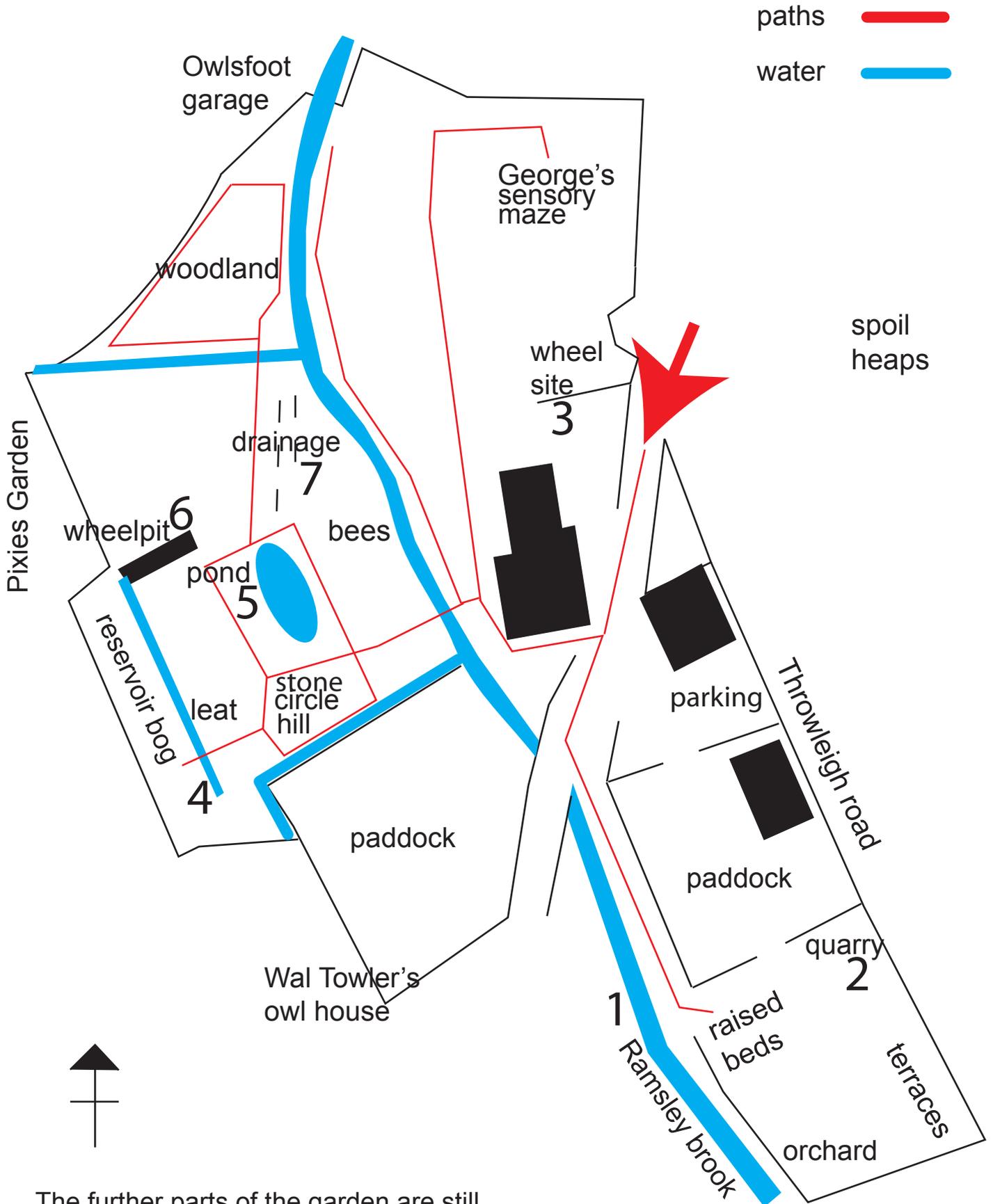


# Hérons Brook mine remains



The further parts of the garden are still being rescued from the wild, so stout shoes or gumboots might be needed for them.

## **1. The Sticklepath-Lustleigh fault**

The Ramsley brook is surface evidence of the Sticklepath-Lustleigh earthquake fault line, which runs NW/SE right across Devon. The fault line dates back to about 300 million BC, soon after the Dartmoor granite was laid down, and it is still active. (A spur at North Bovey moved on 23 June 2011 at Richter scale 2.7; we heard it as a long low rumbling.) At times in the past the fault line has opened sideways, creating cracks in the rocks. Mineral-bearing water flowed into the cracks and left the copper and arsenic deposits that were mined in the Ramsley mine. More recently (but still long ago) the fault moved lengthwise, and the mineral-bearing beds SW of the line were carried up to Skaigh; those beds have been mined at Ivy Tor Mine and Belstone Consols. The fault is not vertical and its exact line is not precise.

## **2. Mineral-bearing rocks**

At the back of the small quarry you can see broken rocks with a lot of empty space between them. In wet seasons water flows into this space and is carried downhill underground. You can probably see some of it trickling down a channel on the left side. We are not geologists, but we think the rock is Lower Carboniferous shale, a sedimentary rock laid down around 350 million BC in one of the strips of sea between the old continents of Gondwanaland to the south and Laurentia to the north as they slid slowly together. (Today the only relic of these seas in this part of Britain is the Bristol Channel.) The rock is fragile and breaks open easily, and often you can find minerals in the cracks. If it was higher grade the Ramsley mine would have expanded to take it in. The earth around here is polluted with arsenic, which is why we grow the vegetables in raised beds in earth taken from elsewhere.

## **3. The crusher wheel**

The Ramsley mine had a wheel here of diameter 35 feet; old photos show it clearly. It was driven by a leat taken from the Blackaton below Shilley Pool. (Only the head of the leat still carries water, and it's often dry. When wet it now drops into the Ramsley brook.) The ore was transported over the road by tramway across a viaduct from the dressing floors behind the present spoil heaps, and then crushed using power from the wheel. (Copper ore is crushed but not stamped.) Today the wall at the back of the garden bed lines up exactly with the position of the wheel, and we guess it is what remains of the original wheel housing, which survived intact until around 1960.

## **4. The Ford Arsenic and Copper Works leat and reservoir**

The Ford Arsenic and Copper Works was formed in the late 19th century to mine at Ford. But the mine there proved useless, so the company subcontracted to the Ramsley mine to do final sifting of its ores, until the Ramsley mine stopped work in 1909. The leat was built round about 1900;

before that there was a leat running down the hill further north, taking water from the little river that runs down from Pixies Garden. The reservoir, behind and to the sides of the long low hill, might be older. It's still very effective; it supplies water through both summer drought and frozen winter. The leat is partly stone-lined and partly lined with low-grade concrete, and from the bridge by the stone circle you can see an old sluice gate made of wood and metal. We may know more when we finish clearing the leat.

## **5. The buddles and/or slime pits**

These are devices for separating out heavier and lighter powdered rock. They are shown on the 1886 Ordnance Survey map at the same place as the present pond. They use water; maybe the reservoir was built to supply them. There was a pond here when we bought the house, and we have no idea what was below it. (That is, apart from a pond liner and a lot of bamboo roots that made holes in it and then rotted. The level of the water is held up by the water table, so no liner was needed.)

## **6. The wheel pit**

This might be one of the best preserved wheel pits on Dartmoor. We still have to clear it out. At the bottom end the water flows into a narrow tunnel that comes out in the Ramsley brook 19 metres away. The tunnel is stone-lined at both ends. From 1900 the wheel provided power for some expensive Wilfley tables in a hut whose foundations you can see at the northern corner of the pit. These tables separated out the powdered ore by shaking it on a sloping surface. But the pit is already shown on the 1886 Ordnance Survey map, and we don't know what it was used for then.

## **7. The drainage channels**

This area was part of the Ford Works' dressing floors. Photos show that crushed ore was carried here over the river from the crusher wheel. In around 1960 the area was capped with six inches of a red-brown clay sealant supplied by Unilever (according to some plastic packaging we found underneath it). You can see a heap of this clay about five metres north of the pond. Reports say that the capping was for the safety of children who played in this area, but we don't know exactly what the danger was. Poison? When we dug the tailrace for the pond (the righthand channel) we uncovered the timber that you can see here, which must be over a hundred years old. Certainly part of it is a drainage channel. Helen Harris' book *Industrial Archaeology of Dartmoor* suggests that there is also some stonework under the sealant. We would be very happy to help any industrial archaeologists who would like to investigate it further.

Helen and Wilf Hodges  
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