

## A day in the life of a charcoal burner

Hi! My name is Sam Ansell and I am a **coppice worker** and **charcoal burner**.



### Coppicing

A coppice worker is someone who looks after woods and trees in a special way – called coppicing.

Coppicing is when you cut down trees and then they grow back from the roots with lots of shoots instead of a single trunk.



**Coppicing** has been happening in our woods for thousands of years. The word comes from the French *couper*, which means “to cut”, but the growing back bit is just as important!

You get loads and loads of thin shoots (coppice workers call them “rods”) when you cut coppice, and these can be used for a wide range of different products.

In the past, there were hundreds of different crafts and trades that used coppice wood to make their products.

Nowadays, there are a lot less coppice workers, but people are starting to realise that coppicing is still important. Lots of plants and animals benefit from coppicing, and the products that come out of the woods are really useful.

There are also many people who still know the traditional crafts and who are teaching their skills to others.

Here are some of the things that we get out of the woods that we coppice:

- Firewood for heating people’s houses
- Stakes for traditional hedges
- Sticks for people to use in their gardens and allotments
- Bundles of twigs to stop erosion on river banks
- Handles for tools and brooms
- Wood for making furniture, baskets and craft items
- Wood for making charcoal



We try to find a use for everything, so that nothing is wasted!

If you are using a product that comes from a coppiced woodland then it will have come from somewhere close to where you live.

The wood that it came from will be really good for wildlife – there will be lots of different plants and animals who really like using the wood for their home.

You will also be supporting a coppice worker or craftsman – someone who uses their skill to make things without needing a factory!

Here is a comparison between something that has been made by a craftsman and something that has been made by a factory:

<b>Factory</b>	<b>Craftsman</b>
<i>Little or no skill required</i>	<i>Lots of skill required</i>
<i>Made very quickly</i>	<i>Made more slowly</i>
<i>Everything made exactly the same</i>	<i>Everything made very slightly different</i>
<i>Will break quite soon</i>	<i>Will last for ages</i>
<i>Will be just good enough to work</i>	<i>Will work really well</i>
<i>Need lots of energy to make</i>	<i>Need hardly any energy to make</i>
<i>There will be pollution</i>	<i>Clean and pollution free</i>
<i>Will probably come from very far away</i>	<i>Will come from close to where you live</i>
<i>Really cheap</i>	<i>More expensive</i>



## Charcoal Burning

Charcoal is made from wood that has been heated up, with only a small amount of air allowed in. This forces out the water and gas that is normally found in wood and leaves you with charcoal. Charcoal used to be used in factories for making iron and steel, but nowadays most factories use coal, gas or electricity. Nearly all the charcoal we make is sold to people for having BBQs. The great thing about the charcoal we make is that it comes from local woods that are really well looked after. A lot of charcoal that you can buy in the shops comes from rainforests where the trees and animals are under threat. There are lots of different ways to make it, but we use large metal kilns.



### My day making charcoal

I wake up at 7 in the morning and have my breakfast – porridge in the winter and muesli in the summer.

The people I work with arrive at 8 to start work. The first job is emptying the kilns. One of us has to jump inside the big kilns and shovel the charcoal out into a grader. This is a rotating sieve that filters out the dust and the pieces of charcoal that are too small.

As you can see it is really mucky work! We wear old clothes and we have special masks that stop us from breathing in the charcoal dust.



Once the charcoal has been through the grader it gets checked to make sure that it is good quality, then put into bags. With three of us we can empty two kilns in a morning – that's half a ton of charcoal!



We stop for lunch at 12. It's really nice to have a good lunch after all the hard work in the morning!

In the afternoon we have to fill the kilns with wood ready for another burn. First of all, we make a special layer in the bottom of the kiln. The kiln has chimneys all around the outside and it's important to make channels from the chimneys to the middle of the kiln.



Once the bottom layer is finished we put lots of kindling and brown ends (bits of wood that have not completely turned into charcoal) in the middle. Then we fill the whole kiln up with wood. We sometimes use a tractor with a circular saw and a conveyer belt to fill up the kilns, or sometimes we use a chainsaw and throw the wood in by hand – it depends what kind of wood we are using.



We always use hardwood – which is from trees that drop their leaves in the winter (deciduous trees is another word for them). The wood has to be seasoned (cut down and left to dry out) for at least a year before we can use it.

Once the kilns are almost overflowing with wood we put on the lids on. At about 4 in the afternoon we light them. There needs to be a gap of at least a foot between the top of the kiln and the lid when you come to light the kiln. This gap means that when you start the fire in the bottom of the kiln, there is lots of air getting in. Lots of air makes everything start to burn really well. After about 2 hours, the lids settle down onto the kiln and then we seal it all up using sand. A well-sealed kiln means that the only air getting in and out is through the chimneys.



This is not the end of my day!

I have to stay at the yard the whole time the kilns are burning – which usually takes 24 hours. I have a caravan that I can stay in – and all through the evening and night I have to check the kilns to make sure everything is going OK. Some parts of the kiln get hotter than other parts because of the way the air goes in and out. In the morning I will wake up early and change the chimneys around so that the heat spreads more evenly through the kiln.



At about 4 in the afternoon on the next day, I will close the kilns down. I take all the chimneys off and seal all the air out by putting wet socks filled with sand into the holes that the chimneys were in. I also go around the edge of the kiln and the lid filling any gaps with sand. Once there is no air allowed into the kiln, the fire will be put out and it will all start to cool down. It can take two days for it to cool down completely, so to be safe I usually wait at least a week before opening up the kilns and shovelling everything out again!