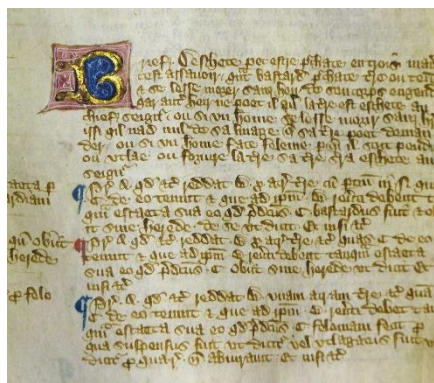




Hello Trees Resource Sheet

What to look for outdoors all year

Make Oak Gall Ink



Magna Carta was written 800 years ago in ink made from oak galls.

We can still read the document now: the ink has lasted all that time. In fact, all important documents were written on vellum with ink made from oak galls.

At the Woodland Trust Heartwood Summer Festival 2017, people had made ink from oak galls and visitors could write with it. I asked for the recipe and was given it. I am going to have a go at making the ink.



Will you have a go, too? We can compare notes next week. I shall put my notes on the [Facebook Hello Trees page](#). It would be brilliant if you would do the same.

Here is the recipe I was sent: [my additions are in square brackets]

1. Crush a collection of oak galls [see overleaf – at the end of the recipe, I mean, not on top of an oak leaf!!]. Green and brown (old) ones seem to work equally well. A mortar and pestle is recommended, though I used a hammer and then a coffee grinder on the hard, brown ones!
2. Soak in water for 24 hours. One recipe recommends a pint of water to 2 ounces crushed galls. I think best to err on the strong side. Being impatient I boiled the mix for 20 minutes instead - it worked. When cool enough filter or strain to give solution A. I used a coffee filter. Solution A contains tannin extracted from the oak galls.
3. (This is the instruction that you should have read earlier. In my experience, all recipes have one!) Put nails and/or wire wool in water and leave to go rusty - a week will do it. Then pour off or filter to produce solution B. I cheated here and made a strong solution of ferrous sulphate - it is used to kill moss on lawns and I think is readily available. I have used both methods and both work.
3. Get children to pipette 5 cc of each solution into a small glass jar and, hey presto, it turns black immediately. I bought 100 plastic 5 ml finger squeeze pipettes from Amazon. [I found 100 for £6.99 on line.] It is important to use a different pipette for each solution otherwise your two solutions get contaminated and go black.
4. For perfection you now add a little gum Arabic (available from art shops). [I found 75ml liquid for £6.50 on line] This is not essential, but makes the ink flow better and gives added brilliance.
5. Pluck the primary wing feathers from a goose and make a pen. Not having a goose, I used the hollow shoots of a bamboo in the garden. You need to apply the ink fairly thickly and as it dries it turns jet black.



[See you on Facebook!](#)

Hello Trees Resource Sheet

What to look for outdoors all year Make Oak Gall Ink

Oak galls come in many different shapes.



Oak Marble Gall



Oak Artichoke Gall



Oak Apple Gall



Oak Knopper Gall



I am going to collect any shape of oak gall I can find.



Oak galls are puzzling things.



When a gall wasp pierces the oak, and lays her eggs in the tree, the oak shields itself by wrapping protective material around the eggs.



What is amazing to me is that there is different material formed around the eggs of each different species of gall wasps' eggs.

And each of those different kinds of material are just what that gall wasp's grubs need as food when they hatch out of the eggs.



The grubs stay safely in the gall, guzzling the gall's insides until they form cocoons round themselves, and then hatch out as wasps with wings.



That is excellent for the wasp grubs, but I cannot see any advantage to the oak. Can you?

Are we asking the wrong question – or looking at it only from the oak's point of view.



The process makes more sense if we think of the advantage to the wasp: those wasp grubs that are able to thrive on the material the oak gall provides, would be the ones to prosper.



Have a look at any oak galls you find.



Can you see a hole through which the wasps have flown out?



Can you see where the gall was formed? Was it on the leaf, twig or acorn of the oak tree?



See what else you can find out about oak galls and oak gall wasps and share it with us on [Hello Trees Facebook](#).