

Fancy perfect pitch?

By James Watson, *Native Awareness*



For me the greatest joy from learning and working with the ancient skills of survival is the relationship that develops with nature. When tracking foxes through the woods, making fire by friction or tanning animal skins to make my clothes, I am filled with awe and wonder. My respect for our ancestors and their skills knows no bounds and I am always eager for more knowledge, more experiences.

Collecting and using tree resins for glues, fillers, and waterproofing is definitely a task I cherish. One hears the description of resin as the blood of a tree and I like this analogy. When we bleed our blood congeals to make a scab to protect the wound and so too do trees. The resin oozes to coat a new injury and prevent infection. Many species provide suitable resins to work with. I have used cedar, juniper, fruit, pine, fir and spruce, to name a few but my best results have occurred with the last three.



Apprentice at work



Collecting resin



An hour of collecting

Collecting and Processing

Resins come in three forms, crude, rendered and pure. The crude resins are those that are found on old wounds on the tree and can sometimes be difficult to see as they closely resemble the tree bark. I label this variety as crude because of the many inclusions, such as dust and bits of flaked bark. It is not unusual to find insects that once alighted at precisely the wrong place!

Crude resins are perfectly acceptable for simple fixings and repairs but for finer projects and artistic embellishment the resin must be pure, either as a collected substance or rendered from crude.

Rendering can be achieved simply by melting the crude resin on a suitable stone by the fire. The next step is to filter the resin through a finely woven basket, or if you are not in a survival or primitive situation, take it home and melt the crude in a metal can and push it through a sieve.

There is another, non primitive method of rendering and that is to mix the crude resin in

an empty jar with either turpentine or white spirit. Shake vigorously for a while and leave to settle as the spirit dissolves the resin. Any debris will eventually lie on the bottom with the dissolved resin at the top if a clear spirit is used it will turn a lovely shade of amber.

The next stage is to filter the contents through a sieve, or you could try using coffee filter paper. You may feel that there is not that much resin at first, but wait, you will be surprised. The jar should now be placed in a warm spot, a south facing window sill is favourite and the process of evaporation will occur naturally to leave pure resin. For the less patient you can boil the mixture. This method does have the potential for danger, so exercise extreme care and never leave unattended and always wear suitable gloves. Should the contents ignite place a cover over the pot to deny oxygen. As the liquid is boiled off it will become thicker leaving pure resin.



Rendering crude resin is all very well but I do favour using pure resin whenever possible and there are several ways to harvest it. Try tapping, by piercing the bark to reach the cambian layer or, alternatively, look out for freshly injured trees where the protection process has begun. Perhaps the most obvious is to listen out for chainsaws, as thinned out areas of forestry are a good source of resin.

When I go out collecting I take my time and stalk from tree to tree, as I always endeavour to return to the rhythm of the woods. As I remove the resin from the tree I like to deeply breathe in the aroma and also the smells of the woods. This is a good time to dream about the future crafts that the pitch will help me make. I always go out with a survival mind, not only looking for one resource but being open to all the possibilities. I may stop and make a fire having used the dry pine needles as a tinder, to enjoy freshly brewed pine needle tea, or perhaps, collect pine needles or roots to make baskets. A bonus is to be enjoyed when burning pine or fir logs as they often weep resin which bubbles to the surface. There is great pleasure in 'taking in the day' and enjoying the process.

Hardening Agents.

To make good pitch it is essential that the resin is mixed with a hardening agent. Many materials have been used including charcoal, white hardwood ash, mollusc shells, egg shells, herbivore droppings and pottery shards. Each agent has its benefits and uses, some being flexible, waterproof, non waterproof or stiff. The chosen hardening agent should be ground to a powder and mixed with the hot melted resin at a fifty, fifty ratio.

My favourite concoction is a mixture of egg shells and resin, thus ensuing that the pitch being both waterproof and flexible. To make a very fine egg shell powder try roasting the shells on the fire before grinding and add a little bee's wax to make the pitch smoother and extremely flexible. This is then the perfect pitch for jobs such as hafting arrowheads or filling cracks in coal burnt out bowls.

Application

The mixed pitch can be used directly, heated from the stone, or, whilst it is hot I make up 'pitch sticks' which are portable and ready for use at any time.



Pitch Sticks And Resin

All you need is a twig about 10cm long which is dipped in the hot resin, coating about half of the stick. Leave it to go tacky, then roll in the hardening agent. Once cool repeat the process, building up about ten layers. Whatever your survival situation or whenever you wish to practise your skills, providing fire is available to heat the stick, you will always have good pitch to hand.

When I use pitch to haft an arrow head, I warm both the notch in the arrow shaft and the arrow head then apply the pitch to the notch leaving it to cool. Later I heat the notch over a flame and pressing the warmed arrow head into the notch smooth and shape the pitch whilst still tacky. Should a mistake be made it is easily rectified by reheating and repositioning.



Arrow Materials



Arrow Head With Pitch



Using Pitch Stick



Finished Arrow with sinew

Pitch has so many uses. I add a little with bees wax to cordage to considerably strengthen it, a great technique for stinging with nettle bow strings. Pitch is most important too in the construction of water carriers. I would love to hear of other peoples' experiences in the use of tree resins and any tips that you may care to pass on. It's good to share the knowledge.

Why not send in a top tip or if you have a question 'ask our expert'.