## **Lignatic theory**

Magnetism was 'discovered' many years ago but its effects were known much earlier even though it was not understood. The Vikings are said to have used needles rubbed against a loadstone for navigation as a primitive compass.

Longbow archers have known for many years that wooden arrows are attracted towards trees. Could this be empirical proof of an unknown force of attraction between wooden objects? If such a force exists it has to have a name so let us call it lignatism (lignin is one of the main ingredients of wood).

In order to prove our theory we need a large number of archers to carry out experiments shooting wooden arrows near trees and measuring the deflection caused by lignatism. As no scientific experiment would be conclusive without carrying out controls we need equal numbers of archers shooting wooden arrows with no trees in the vicinity and measuring the deflection if any. Additional tests would have to be carried out by archers shooting non-wooden arrows both near and away from trees and measuring the deflection.

Not all metals are magnetic and those that are have different magnetic properties. We may therefore assume the same is true of wood and lignatism. Having proven lignatism exists we need to measure the lignatic properties of various woods. This opens a whole new field of research leading to potential Phd, Msc and even Nobel prizes for those dedicated enough to carry the research through to its inevitable conclusion. Is POC attracted towards softwoods more than hardwoods? Is Ash more lignatic than POC? Is lignatism stronger in Spring when the sap is rising? Do arrows go lower in Autumn when the leaves have fallen? The questions are endless.

We are currently only beginning to scratch the surface of this intriguing problem and it will take many years of patient research before the scientists will be able to fully define the lignatic properties of various woods, meanwhile we longbow archers know the answer already – if there is a tree anywhere near the arrow will hit it.

As straw is slightly woody could this explain why wooden arrows are attracted more towards the white rather than the gold? We may assume that a platicised target face masks the lignatic attraction of the straw except where it leaks round the edges of the face and as a consequence the arrows are attracted towards the outer fringes of the target. It isn't the archer it's the laws of physics. Wooden arrows are attracted towards the petticoat.

In the absence of any trees (or any wood with strong lignatic properties) the nearest 'woody' mass is the matted roots of the grass. Could this explain why longbow arrows so often end up in the green rather than in the gold? Again it's the physics rather than the archer.

It was many years after magnetism was first discovered that scientists were able to harness its properties and come up with the electric motor. Lignatism is in its early stages but it would be pleasing to think that we could repeat this process and use it to produce the first truly green energy source. How soon before we see the 1 Kw wooden fire heating our homes??