

Pi appears in crop circle



© 1997–2009, Millennium Mathematics Project, University of Cambridge.

Permission is granted to print and copy this page on paper for non-commercial use. For other uses, including electronic redistribution, please contact us.

01/07/2008

News

Pi appears in crop circle



Figure 1: Barbury Castle crop circle denoting Pi. Crop Circle photos and reports courtesy [The Crop Circle Connector](#).

If we are to believe the latest signs from outer space, the local aliens are keen mathematicians.

Pi appears in crop circle

A new crop circle appeared on the 1st of June this year in a barley field near Barbury Castle in Wiltshire, England, measuring 150 feet in diameter and correctly representing the first 10 digits of the irrational constant pi.

If you look at figure 1, you will notice that the grooves in the circle spiral outwards with steps at various points along the way. Taking a look now at figure 2, you will see that these steps occur at particular angles the circle is divided into 10 equal segments of 36 degrees each. Starting at the centre, you can see that the first section is 3 segments wide. Then there is a step and underneath this step is a small circle. This is the decimal point. The next section is 1 segment wide and then there is another step. The following section is 4 segments wide, and so on until the final number encoded is 3.141592654. Michael Reed, the astrophysicist who first decoded the image, is quoted on earthfiles.com as saying:

"The fact that the Pi decimal point is included and there is rounding up to 10 decimal places is to me a little mind boggling!"

The location of the new Pi crop circle is 51.488258 degrees north, 1.771964 west, but unfortunately it has not yet appeared on Google maps.

Figure 2: Right image shows the circle divided into 10 equal segments. The number of segments moved through at each step, starting from the centre, denotes a decimal point of Pi. Left image courtesy [The Crop Circle Connector](#).

This latest crop circle has appeared on the eve of the new X-files movie [I want to believe](#) and has created quite a storm amongst crop circle enthusiasts. Lucy Pringle, a crop circle researcher, was quoted in [The Scotsman](#) as finding it hard to believe such an intricate crop circle could have been created by humans, and whilst there was rain the night before it appeared, there was no mud inside the formation.

"You can do it on a computer, but you try putting that in a field in the middle of the night and achieving that degree of mathematical accuracy."

Pringle's theory is that crop circles are created by a spiralling electromagnetic force that hits the ground for a nanosecond.

Pi appears in crop circle

Local councillor Stewart Dobson said: "It's hard to believe somebody managed to work (the design) out so it shows pi so accurately. It's either a very educated person who has done it or a very educated alien." *Plus* tends to think that an alien capable of making it millions of light years across the Universe to visit us is more than likely to have some understanding of pi...

The Julia set crop circle. Image courtesy [The Crop Circle Connector](#).

It is not the first time mathematics has appeared in a crop circle. Indeed, whether it's the nerdy nature of crop circle fraudsters, or because aliens choose maths as a method of communication because of its fundamental role in the Universe, mathematical patterns are fairly common. One of the best-known mathematical crop circles appeared in the form of the Julia set 12 years ago, again in Wiltshire, near Stone Henge.

For the latest buzz on this crop circle, and to have a peek at all the theories regarding it, see [crop circle connector](#). And whatever caused these mathematical imprints on the face of the Earth, always remember, the truth is out there.

Marc West



Plus is part of the family of activities in the Millennium Mathematics Project, which also includes the [NRICH](#) and [MOTIVATE](#) sites.