

What are crop circles?

hroughout the world a great number of beautiful and complex markings continually appear in a whole variety of media – not just crops, but grass, reed beds, forest tops and even sand, snow or ice – any medium, in fact, that will take an imprint.

Apart from the beauty of crop circles, their most striking feature is the sharp and distinct cut-off point between the swirled and flattened area and the standing crop around.

Formations have been recorded all over the world, tending to manifest on or near ancient, sacred sites, acknowledged in the past as places of power. They are by no means a new phenomenon: evidence of crop formations goes back many centuries.

Many thousands of these formations have been recorded, measured, drawn and photographed worldwide. Scientists around the world are working to establish not only how but why they were formed. The author's work concentrates on the effects of electromagnetic fields on living matter.

Deciphering the meaning encoded in the symbols and their implications for mankind is recognized by many as an important issue in the investigation of this enthralling mystery.



Che gigantic 'Jaw Dropper' formation, Milk Hill, Wiltshire, 12 August 2001.

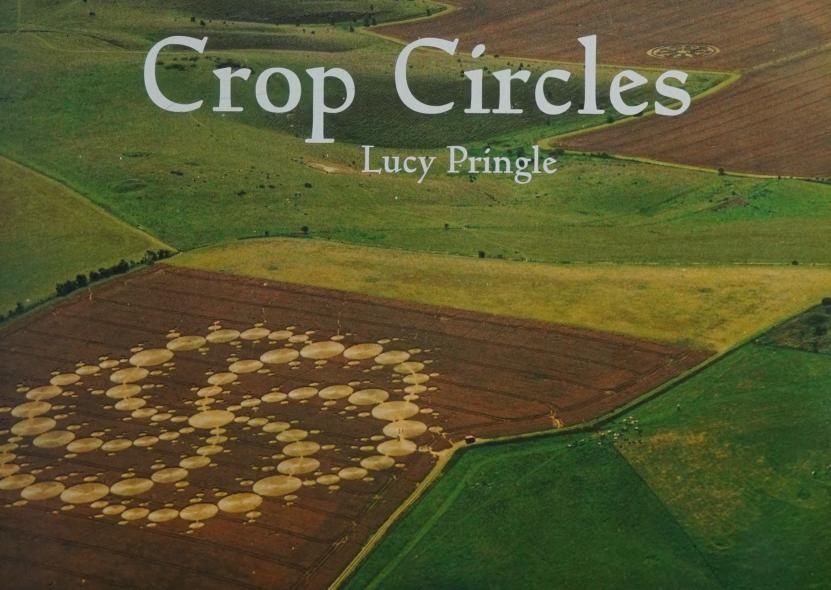
FRONC COVER MAIN:
Bishops Sutton, Hampshire,
14 July (right) and 30 July
(left) 2000. Crop: wheat.
Diameters: left: c.55 metres
(180 feet); right 92 metres
(300 feet).

INSEC COD LEFC: Spiral, Woodborough Hill, Wiltshire (12 August 2002), Crop; wheat. Diameter: c.73 metres (240 feet).

Inset cop pight: Arebury Crusloe (22 July 2000). Crop: wheat. Diameter: 55 metres (180 feet).

INSEC BOCCOM LEFT: Liddington, Wiltshire (24 June 2001). Crop: wheat. Diameter: c.73 metres (240 feet).

INSEC BOCCOM RIGHC: Oare, Wiltshire (3 August 2000). Crop: wheat. Diameter: c.67 metres (220 feet).





PIGHT: Stonehenge at dusk. Such ancient megaliths as this resemble crop formations in their design.

Inset: 'Che Mowing Devil', a woodcut of 1687 depicting one of the first recorded crop formations.

An ancient phenomenon

Many people mistakenly believe that crop circles are a recent phenomenon. Yet ancient images carved into stone reveal evidence of them dating back to AD 800. They may go back much further still, for age-old megalithic structures such as Stonehenge in Wiltshire and Stanton Drew in Somerset demonstrate considerable similarities in their design to crop

formations. Just as ancient edifices of stone and wood appeared all over the world, crop circles too are a universal phenomenon. We may therefore ponder whether our prehistoric ancestors recorded important crop events in the medium of their time.

One of the earliest recorded crop circles, dating back to 1687, is depicted as a woodcut. Called 'The Mowing Devil', it shows an implike figure flattening the crop into a circle. The story goes that a farmer refused to pay the sum requested by the reaper and was heard to say he would rather the Devil took his oats instead. That night, strange sounds were heard and strange lights were seen. Next day the farmer returned to the field and found part of his crop laid down in circles.

He took to his heels and fled in terror. The mention of lights in this account strikes a chord with present-day experiences. Often on the night that crop formations appear, strange lights are seen hovering above the field in question.

However, it is since the 1980s that crop circles have manifested in such large numbers, and with the greatest insistence. Generally, formations are no longer simple circles, the quality, size and complexity tending to increase. Why is this? Is it possible that an underlying intelligence is responding to increased public interest?

Furthermore, the circles are spreading all over the planet. In the Yemen in 2002 a formation was found in the sand 'that the winds could not blow away'.

In particular, the sight of wondrously beautiful images gracing England's ancient landscape holds a fascination for people from all over the world. Each year, coachloads of international visitors flock to the fields to glimpse and possibly participate in these superb events. Like the swallows, they disappear again at the end of the summer, their hopes and dreams fulfilled.



THE SUMME SEQUENCE

The first crop circles appear in April in the vellow-flowered canola (oilseed rape). Barley comes next, then oats and finally wheat. Frequently, after harvesting, a green replica of the formation may be seen, the result of seeds being trodden into the ground by visitors and germinating beneath the fallen crop.







LEFC: Appropriately, a real horse overlooks a formation at Hackpen Hill, Wiltshire (4 July 1999), from the site of a horse carved in the chalk hillside in 1838.

Below: Winchester Cathedral. Chis, in common with many early churches, is placed on an energy line.

The breath of the dragon

Crop circles have been found in over 60 countries, but predominantly in the United Kingdom. Within Britain, most formations occur in the Wessex region, an area stretching across the south of England from Somerset in the west to Sussex in the east. A large swathe of this landscape is based on chalk rocks. Geophysical surveys conducted in the late 1990s by

Glen Broughton and Steve Page found that 71 per cent of all crop events in Great Britain appeared on chalk land, and that 87 per cent lay above aquifers (water-bearing rocks). A possible explanation for this high incidence is that the vertical movement of water from the aquifers provides an attractor for the electrical discharge of the circle-making force.

Beneath the surface of the earth's crust there is almost as much activity as in the heavens. Things are constantly whirling around to a greater or lesser degree, scraping against and colliding with each other, just as various levels of tectonic plates fluctuate, grow and slide over one another. As they jostle, they release pentup gases resulting in earthquakes and volcanic activity. The enormous pressure on rock crystals produces natural electromagnetic fields which fluctuate with the level of movement beneath the earth's crust. Studies in 1994 by Canadian professor

Michael Persinger led him to believe that there is a connection between earthquakes, electromagnetic fields, unusual brain activity (such as visual hallucination and out-of-body sensations) and paranormal events such as UFOs.

It is no surprise, therefore, that the ancient Chinese believed that our planet is a living, breathing organism, and that the earth's subtle energies – what the

Chinese called 'the breath of the dragon' – are channelled along a web of geodetic (i.e. regular and geometrical) 'energy lines' that encompass the globe. Some of them are linear, some are sinusoidal (wavy) and others spiral.

Our ancestors, living close to nature, were sensitive to the flow of these forces, and our earliest churches and sacred monuments are precisely placed on locations of heightened electromagnetic energy. Similarly, all genuine crop circles appear on energy lines.





ABOVE: Double spiral, West Overton, Wiltshire (22 June 2002). Crop: barley. Diameter: c.73 metres (240 feet).

Squaring the circle

One of the most awe-inspiring aspects of crop circles is their mathematical and geometrical integrity. Over the years an assortment of formations has appeared: simple circles; vesica pisces (precisely placed overlapping circles); squares and cubes, some within circles; pentagrams; varied polygons; wondrous spirals and fractals. Astronomical and musical patterns are also

represented in many formations, as are mathematical elements such as the Fibonacci sequence and the diatonic ratio.

Genuine formations display a precision that is beyond belief. However large the formation may be – perhaps 300 metres (330 yards) or more in diameter – the accuracy is still present. The triple spiral at Avebury Trusloe, Wiltshire, in 1996 is a superb example of this.





The equilateral triangles spiralling and extending to the outer limits of the formation not only display an amazing mathematical genius but also serve to confirm the manner in which the twisting force of the vortex force descends to the ground.

The first person to draw up disciplined diagrams of early formations was the late Peter Baillie, a chartered surveyor. To his increasing annoyance, an angle of 19.47 degrees kept occurring, which he adjusted to 19.5 degrees. It was only later



that a connection was drawn between this phenomenon and the precise angle described by the wake of a ship or that of a duck swimming along, known as the 'Kelvin Wedge'.

In addition, the red spot on Jupiter, Mount Olympus on Mars and the volcano Mauna Loa in Hawaii are all located at a latitude of exactly 19.47 degrees. It defies belief that any human being would be able to produce this precise angle in a field when working

in near darkness and with visibility restricted owing to the height of the crop.

Another example of extraordinary exactitude was the double spiral in a field of barley at West Overton, Wiltshire, in 2002 (pictured opposite page). Even mathematicians with state-of-the-art instruments had extraordinary difficulty in drawing this formation accurately. Imagine, then, reproducing it in a field in difficult conditions!

Sceptics are forced to accept that those formations regarded by researchers as genuine contain geometry of a bewildering and increasing complexity. The twin questions of where this knowledge and expertise comes from and how it is imprinted so accurately on the landscape remain to be answered.

LEFT AND ABOVE: Che triple spiral at Avebury Trusloe, Wiltshire (29 July 1996), consisting of 189 circles, reveals awesome mathematical precision. A series of perfect equilateral triangles extends to the perimeter. Crop: wheat. Diameter: c.300 metres (1,000 feet).

Are all crop circles man-made?

The media would have us believe that all circles are man-made. There is no doubt whatever that some formations have been produced by humans. These fall into two categories, 'manmade' and 'hoaxed', with an ethical distinction to be drawn between the two. Man-made formations include those created for television programmes or for advertising purposes. Others in

the 'man-made' bracket are constructed for spiritual purposes in an attempt to

communicate with perceived circle-making forces.

Hoaxers, on the other hand, operate under cover of darkness, without the permission of the farmer, with the intention of deceiving. Their declared motives include the sheer adrenaline rush they experience and the media attention they receive. Unfortunately, from the point of view of the serious researcher, publicity serves only to encourage their activities further. Their claim of ownership to most, if not all, crop formations lacks credibility for reasons explained in this book. However, to those who are afraid of the unknown, the human explanation is a safer, and therefore more preferable, option.



ABOVE: A formation at Milk Hill, near the Wansdyke, Wiltshire, commissioned for a BBC CV programme in August 1998.

It is interesting to note that when asked to replicate a formation they claim to have made, hoaxers have never once been able to achieve this. One of the most obvious shortcomings of manmade crop circles is their lack of mathematical accuracy. The formation may look extremely striking, but when critically examined by means of aerial photography, there are always basic errors of geometry. This was apparent in the formation artificially created in 1998 below

the Wansdyke, near Marlborough, Wiltshire, for the BBC programme Country File. Objective tests were performed by scientists and volunteers who had no idea of the formation's origin. When the results were analysed, none of the anomalies presented by genuine formations, as described in other chapters of this book, were present.

However not all hoaxers are complete villains! A wondrous formation which came to be known as the 'Jaw Dropper' appeared at Milk Hill on the Wansdyke, this time in 2001. Subsequently, Lucy Pringle, the author of this book, was delighted to



ABOVE: Two 1994 formations at Birling Gap, West Sussex resembled cobwebs suspended 50cm (20ins) from the ground. Barley had been bent into a set of complex vortices. It was clear that no weight had been applied to the stems.

receive this message from a team of hoaxers called the Circle Makers: 'If this formation were man-made, allowing for time to get into and out of the field under cover of darkness, the construction time left should be around four hours. Given that there are over 400 circles, some of which span approximately 70 feet [21 metres] in diameter, that would mean that one of those circles would need to be created every 30 seconds - and that's not even allowing any time for the surveying, purely flattening. This formation pushes the envelope and that's a MASSIVE understatement!'





Combinson at the spot near Hambledon, Surrey, where they witnessed the formation of a crop circle in May 1990.

It only took seconds

Many people claim to have witnessed the actual appearance of crop circles. Three reports in particular have survived the author's closest scrutiny. The first of these is the experience of Garv and Vivienne Tomlinson.

One still and humid May evening in 1990, the couple had strolled to the top of Byrony Hill, near the Surrey village of

Hambledon. As they returned downhill on a path through a wheat field, they noticed the wind blowing the corn. Looking back up the hill, they were startled to see trees bending over. Within seconds, a mist had appeared which rolled downhill towards them like a shimmering whirlwind, its noise intensifying to a high pitch like deafening pan pipes. Gary and Vivienne expected to see a helicopter overhead. There was no helicopter

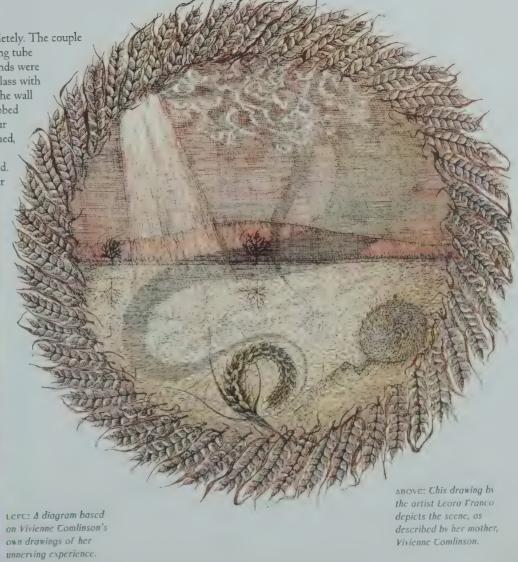
The shimmering air circled around them, creating pressure above and below them, forcing down so hard that they could hardly stand up, yet seeming to suck them upwards at the same time. Their hair stood on end, they had pins and needles from head to foot and both were quite unable to break free from the grasp of the whirling air. 'I tried to call out to Gary,' Vivienne said, 'but my voice seemed to get lost in the volume of noise, as we were spun and swirled around.'

Suddenly the wind scooped them off the path into the cornfield, and looking down, they saw a circle being formed around them. In seconds, a spiral 2 metres (6 feet) or so in diameter appeared, growing outwards, in its centre a small pyramid of corn stalks. The whirlwind split into two, one whirring and skimming off into the distance, the other whizzing past Vivienne, pushing down corn and then forming a second circle nearby. Again this only took seconds. In the distance, the first wind shimmered as it zigzagged over the corn

Meanwhile in their circle Garv and Vivienne, to their amazement and wonder, watched miniature whirlwinds - small, glistening vortices perhaps 10 centimetres (4 inches) apart - whirl around the corn in small bunches, gently laying down the

corn to enlarge the circle. The general wind had dropped completely. The couple reported that the distant whirlwind was now a transparent glowing tube stretching endlessly up into the sky, while the miniature whirlwinds were fewer and had lost their misty look, appearing more like watery glass with a quivering line inside. Wobbling slowly, they still moved along the wall of the circle. It was growing dark and, in her panic, Vivienne grabbed Gary's hand and pulled him out of the circle. 'Slowly we made our way back in silence, stunned by the event,' she said. 'My ears ached, and we both felt lethargic and nauseous and were suffering from shock'. It transpired that Vivienne's eardrums had been perforated. The entire event, while seeming to last for much longer, was over in the space of a mere seven minutes.







The gentle humming of bees

Witnessing a crop circle appear before one's eyes is, without doubt, a traumatic event. Such was the experience of

retired aircraft engineer Rav Barnes, a keen observer of nature with a logical and analytical mind. One day in July 1981, he was on his regular afternoon dog walk on the downs above Westbury in Wiltshire, passing through a field where, over the years, he had witnessed many strange events taking place. Earlier that day there had been a thunderstorm, but now there was no wind at all. Ray reported that his attention was first drawn to a wave or line around 20 metres (65 feet) wide coming through the cereal crop in a far corner of the field. After travelling across the field in an arc at around 80 kilometres (50 miles) per hour, it dropped to the ground almost ahead of him and clockwise, radially described a circle in approximately four seconds.

Ray made several pertinent observations. For one thing, the force moving the wheat was invisible and did

not appear to disturb the hedge or trees at the field boundary. Also, as the line moved, there was no accompanying wind; the force created neither waves in the corn before or after it, nor any other visual aberration. In the latter part of its linear progress, the line almost disappeared. As the ground also dips, it would seem the line was following the contours of the land at a constant height.

Ray observed that the crop heads only 'jiggled' and did not bend, which would seem to indicate that the line had holes in it like the teeth of a giant comb or that it was sufficiently weak for the cereal heads to pop through it when the pressure reached a certain level. According to Ray, the circle was described radially, in a



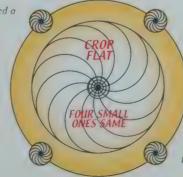
ABOVE: Day Barnes, at the spot where he witnessed a formation appearing in July 1981.

single sweep and at a constant speed, the crop going down 'as neatly as if it had been cut by a giant flan cutter', with no spring-back. This he found awe-inspiring for, cut by a tractor, a flattened crop would always spring back.

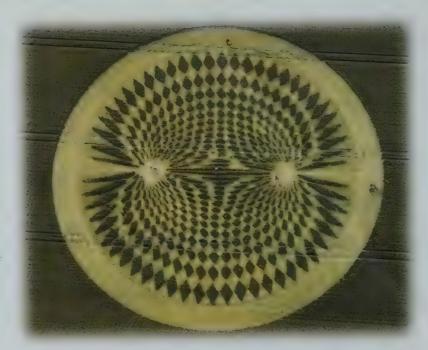
Ray subsequently developed an unusual form of cataract, which he attributes directly to observing the crop

circle appear.

The third event took place in the fenland of Lincolnshire in 1947, when 18-year-old Frederick Smith was working in a field of growing oats. It was a fine, calm April day, with no aircraft around. Suddenly he heard a sound like 'the gentle humming of bees' which rose to a high pitched buzz that seemed to come from far away. Smith felt increasingly faint, but at the same time was dimly aware of circles being formed in the oats, the whole thing taking only three minutes. The farmworker then passed out, only recovering some three hours later, when he found that the crop of green oats, only a few centimetres high, was already rising up undamaged. Such a long period of unconsciousness would seem to indicate a rapid loss of air pressure, similar to when an aeroplane has to dive sharply and oxygen masks are needed.



LEFT: A diagram based on the event witnessed by farm worker Fred Smith, Lincolnshire, 1947.



PIGHT: The Archury Trusloe 'Clectromagnetic Field' formation (22 July 2000). Many people reported strange experiences when visiting this formation. Crop: wheat. Diameter: 55 metres (180 feet).

Her hair stood on end



Crop circles often have a strong effect on those who enter them. The author's database, the largest in the world, based on over 600 reports, indicates that people may experience all manner of symptoms, both physical and psychological. These range from simple headaches, through odd cravings for food or drink to hallucinations and more.

Different people are affected in different ways. One person reported that in several formations on separate occasions, he suffered a compulsive craving for chocolate, despite feeling slightly nauseous. Such a symptom has a proven link to chemical activity in the brain – in this case, presumably, a response to the effects of the residual electromagnetic energy within the formations. Some people have reported that in crop circles their hair has stood on end, retaining the static electricity for days after.

One woman reported that in the 2000 Avebury Trusloe formation in Wiltshire she 'nearly went flying backwards, only managing to save myself by grabbing big handfuls of wheat'. After this, she 'slowly tottered out leaning on a friend, back in one piece when outside the circle'. Instant recovery can also happen when people experience nausea within circles, but feel well again immediately on removing themselves from the influence.

Reports of physical effects tend mostly to be negative in tone, very possibly because people expect to feel well when entering a crop circle, are surprised when they do not, and consequently are more likely to report their feelings.

We must not overlook the positive effects, however. It would seem that arthritis and Parkinson's disease improve temporarily in crop formations, whilst beneficial results of other conditions can be lasting. American author Barbara Lamb reported that in the 2000 Uffington (Berkshire) Thought Bubble

she sought healing for the blood clot in her leg. Selecting her favourite spot in the formation, she lay down with her eyes closed, asking her spirit guides to help her. She was told to picture herself within a warm cocoon of light, while focussing on receiving healing. Two weeks later, back in California, an ultrasound test showed no blood clot at all. The cure appears to be permanent.

In 2001, Colette Ardagh had broken her collarbone and was still receiving regular physiotherapy. While inside the Meonstoke, Hampshire, formation, she was unwittingly asked by the author to collect stones as markers. To Colette's amazement, she was able to stretch out her damaged shoulder easily. At her next physiotherapy appointment, the locum physiotherapist was not able to find any evidence of a break, the usual residual bump being completely absent.

The author herself has experienced a whole range of symptoms within crop formations: negative ones such as acute nausea, disorientation, severe headaches, metallic taste and sudden hunger; positive ones such as healing and euphoria. Indeed the event which drew her into this realm of research was the healing of a badly damaged shoulder in a formation at Morestead, near Winchester, Hampshire, in 1990. An accompanying friend suffering from a circulatory condition linked to Raynaud's disease, found that she was able, in the circle and afterwards to lie flat on her back for the first time in 15 years.

Oral: metallic taste, toothache, unusual thirst

Cranial: headaches

Ocular: vision changes, hallucination

Auditory: hearing voices, music

Digestive: nausea, diarrhoea, sudden hunger Systemic: dizziness, weak knees, leg pain Che 'Chought Bubble', Uffington, Oxfordshire (23 July 2000). Crop: wheat. Length: c.91 metres (300 feet).

the Wansdyke, Wiltshire (20 June 2000), resembled the centrepiece of one of the rose windows in Chartres Cathedral. Crop: barley. Diameter: c.60 metres (200 feet).



shove: Che 'Pentacle'.
Bishop's Cannings, Wiltshire
(13 July 1997). Here, people
experienced effects ranging
from severely negative
symptoms to relief of pain
and feelings of great
happiness. Crop: wheat.
Diameter: 57 metres

They fled for their lives

On the whole, the psychological effects of crop formations tend to be beneficial, but recorded experiences cover the whole gamut of emotions. Many people report pleasant sensations, such as a feeling of peace, love and light, while others have experienced feelings of panic or surrounding evil. On visiting a formation at Avebury at different times, two unrelated sets of

people reported experiencing the same sensations: unease turning to fear and finally to terror. Both groups fled for their lives.

A frequent report is that while meditating, eyes closed, in a crop circle, people have heard someone approach, only to find no one there when they opened their eyes. In the author's view, these strong reactions are due to the residual electromagnetic effects present in the soil and plants after the circle-making force has hit the ground

It is curious that in the same formation – maybe even at the same spot – one person may report experiencing a beneficial reaction, whilst another experiences adverse effects. It seems likely that, just as our metabolisms vary, so will our physiological and psychological responses. The author has found that, in terms of reports received, certain formations almost always produce beneficial reactions and some create largely adverse effects, while the majority produce mixed reactions.

Chought processes affected, short-term memory loss, feelings of panic, terror, evil, peace, love and light, disorientation, sense of a presence.



ABONC: Che 'Cwisted Knot', Beekhampton, Wiltshire (28 July 1999). Crop: wheat. Diameter: c.o0 metres (200 feet).

In 1997 she was one of the first people to visit the 'Pentacle' formation at Bishops Cannings near Devizes, Wiltshire, suffering there dire nausea, severe headache, visual distortions and disorientation – yet, others there felt extremely well. Stace Tussell wrote, 'My very favourite circle was the formation at Bishops Cannings, the gorgeous star. I was experiencing an irritable appendix or possibly ovary pains and felt lousy ... As I traipsed up the path to the circle, I felt horribly drained and flu-like. But on entering the formation, I felt ecstatic and as healthy as I have ever been ... not a bit of pain, no discomfort, just pleasure.'

Unlikely as it may seem, people report being powerfully affected, for better or worse, merely by seeing crop circle images on a screen. A suggested reason for this

is that certain shapes trigger off responses in the brain, a phenomenon known as 'sign stimulus'.

EFFECTS ON ANIMALS

Animals, too, can be affected by crop circles, their reactions less easy than human ones for sceptics to dismiss. Sometimes they become distressed; sometimes the opposite. The cat pictured became uncharacteristically quiet, alert and very interested when allowed to walk round a formation at Alton Barnes, Wiltshire.

Birds too often react. Geese have been observed to avoid flying over a circle by veering to one side or splitting their skein on approaching a formation and regrouping on the other side.



We can compare this to the effect of hearing lovely music, the resonances from the music passing through the ear to the brain, kindling emotions. Furthermore, shapes can apparently trigger off certain reactions or behaviour without the subject having conscious awareness of the process. Several people claim to have been healed during illustrated talks, the frequencies emitted by the geometry of crop circles perhaps interacting with their own frequencies.

Mechanical meltdown

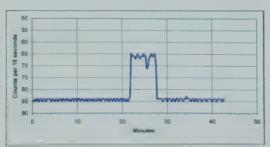
Crop circles appear to affect machines as well as people. Mobile phones that operate normally elsewhere fail inside the crop formation – then work perfectly when outside again! Rolls of film in cameras whizz forwards or backwards; camcorders suddenly stop working; credit cards are wiped clean; wristwatches lose or gain time – or the hands spin round! On

several occasions television crews filming formations experienced technical failures they have never encountered before, despite all the back-up precautions that professionals make. Batteries are especially vulnerable, and tend to drain on entering some formations.

Pilots flying over crop circles sometimes find that their plane's instruments are sent haywire by vertical gravitational distortions. On occasions when flying, the author's camera has mysteriously and frustratingly failed to work just when she had the perfect shot in frame.

Within crop circles, 'hot spots' of energy can occur, where mechanical failures are particularly likely. One of the most expensive episodes involved Dr Roger Taylor, a research immunologist, when using electronic equipment to measure changes in body vitality inside the 'Druid's Knot' formation at Alton Priors, Wiltshire, in July 2002. Despite the author's warning, he placed himself and his equipment in a 'hot spot' where several TV cameras had failed previously. He hoped he would get significant results, and did!

Because of previous electrical failures, Dr Taylor was anxious about the safety of his laptop computer while inside the formation and wanted to monitor a separate battery to see if any change occurred. To this end, a chartered electrical engineer adapted a hand-held computer to record at 15-second intervals. All was



ABOVC: Voltage spike graph, 'Druid's Knot', 28 July 2002.

quiet until around 16.20 hours, when a significant voltage spike occurred, lasting approximately six minutes.

Apparently working in the circle, Dr Taylor's laptop computer, when taken away, became useless to the point where it was necessary to replace the system



ABOVE: Light anomaly on a photograph taken by David Kingston inside a Dorset crop formation.

board. Fortunately, after a costly repair, the research results were still on the hard disk. There are many possible explanations for the computer failure, but the voltage spike seems the most likely.

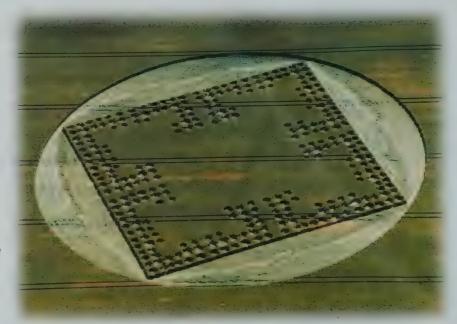
Long-time researcher Heather Collins reported that after visiting the 2002 'Tree of Life' formation in Alton

Barnes, Wiltshire, she walked some miles to Devizes. On arrival, she was surprised that her electronic pedometer registered a higher mileage than she had actually walked. She then realized that it had recalibrated itself to measure in kilometres. To alter settings deliberately, one has to hold down a button firmly for five seconds, so the change could not have happened accidentally.



ABOVE: Hormone tests inside a formation, Beckhampton, Wiltshire (2001).





PIGHE: 'Magic Carpet', Windmill Hill, Wiltshire (16 July 1999). Windmill Hill is yet another ancient and sacred mound near Silbury Hill and the Ayebury complex, thought to date back to 37008c.

Military intervention



Theories have abounded on how crop circles are made and where they come from. Helicopter blades, UFOs, ball lightning – even rutting hedgehogs and whirling dervishes – have been blamed. More seriously, some have suggested that formations are the product of remote lasers or secret technology used by the armed forces. Certainly, the military are keenly, if covertly,

interested in this phenomenon. Military helicopters bristling with equipment often circle around new formations, and have at times displayed an aggressive streak, flying dangerously low over people and even, on at least one occasion, chasing individuals out of a field containing a formation. Why all this interest?

Research suggests that the circle-making force originates in the ionosphere, travelling downwards in the form of a spiralling vortex. As it hits the ground, there would appear to be a huge electrical discharge of some hundreds of thousands of volts per metre for just a nanosecond – if the duration were longer the crop would

be burnt (occasionally evidence of charring on certain flattened stalks has actually been found). It would seem that the changes in the make-up of the crop are consistent with the workings of microwave energy.

Two occurrences tend to support the microwave theory. In 1992, near Milestone in Saskatchewan, Canada, porcupines were found flattened in the centre of a formation. The dehydrated corpses showed no signs of injury or decomposition and did not smell. A year later, in a circle outside Guildford, Surrey, the exploded fragments of birds were found, consistent with a huge emission of electricity.

It is suggested that microwave energy heats the interior of the plant stalks by a steaming process. The energy travels up the stalks, breaking down the molecular structure and stretching the cells as it goes. When the force becomes too great, it escapes through cavities in the nodes (joints) of the stalks. The plants are not damaged and continue to grow. Softened at the base, they fall naturally It would appear that there is a set of complex, subtle energies present, some as yet unknown

Three further discoveries may have significance in determining the origin of crop circles. Firstly, the majority of formations occur between the hours of two and four in the morning, when the ionosphere is at its lowest and the earth's electromagnetic field is at its strongest.

Seed-heads containing no seeds have been discovered – a condition known as polyembrony – apparently occurring as the force hits a young crop when the seeds are undeveloped.

A third discovery is that seeds from inside a formation, despite being dehydrated and wizened, take less time to germinate and need less water than control seeds taken from elsewhere in the field. If replicated, such seeds could be of great benefit to arid third world countries.

The amazing complexity of crop formations leads many people to believe that they are the work of an unknown and hugely creative intelligence, using all the forces of nature available to it.



ABOVE: In 1993 at Wanborough near Guildford, Surrey, fragments of exploded birds were found from crop surface to ground level over a 4-metre (14-foot) radius.

MGHC: Froxfield, Wiltshire (22 July 2003). This 'herringbone' lay of barley is most unusual.







Left: The author burying a bottle of water inside a formation. Results consistently show electrolytic differences between water buried inside and outside formations.

The memory of water

Scientists investigate and assess crop formations in three ways.

The first and most straightforward procedure is a physical
examination on the ground, taking samples of plants, seeds
and soil from inside the formation. Another involves scientific
tests including the author's work on living systems, both
neurophysical (hormones etc.) and biophysical (muscular
reactions). In a third method, the formation is analysed from a mathematical and

geometrical perspective by means of aerial photographs.

It would seem that accurate physical investigation is possible only if very few people have previously entered the crop formation; if not, the evidence is destroyed. Examiners look for signs of weight having been applied, such as with a stomping board, or plank. In a mature crop, damaged plants, stalks without seed-heads or seeds lying under the fallen crop would indicate human involvement. Young, green crops are covered in a grey film. Any disturbance of this would again indicate the presence of humans. Many formations appear during rainy nights. An absence of mud on the fallen crop points towards a genuine phenomenon. However, definitive judgements are often almost impossible to achieve; unless one were present when the event occurred, the verdict must remain open.

The author's investigations rely on reports from people visiting crop circles. Where several independent anecdotal accounts describe the same effects, scientific

research is instigated. Her early research used water as a medium that would absorb or register the circle-making force. As soon as possible after an event had occurred, small, tamper-proof bottles of electrolytically stable Volvic water were buried just under the soil inside and outside formations, the 'outside' bottles acting as control samples. Each bottle was given an identity known only to the author. Between seven and fourteen days later, the bottles were collected. However, during this time, the lay of the crop (the way the stalks have fallen) is often changed beyond recognition owing to the number of visitors, rendering location notes almost useless. Almost always, dowsing had to be used to find the bottles.

Not knowing the origins of any sample, a biophysicist then tested the water for changes, using established techniques for the detection of resonances in potentized liquids. Significant and sometimes dramatic anomalies in comparison with control samples occurred, indicating a resonance in the seed that has been stimulated and has also been retained by the water sample. In another test, the level of bacteria in samples of water buried inside a formation was much greater than the control samples buried outside.

Tests have also been carried out to measure the effects on living tissue of water potentized within crop formations. The heart rate of suitably immunized guinea pigs was used as an indicator of the level of energy present. A significant divergence was observed between the effects of the formation samples and the controls.



pight: A CD-like formation which appeared at Avebury, Wiltshire, on 2 August 1998. Crop: wheat. Diameter: c.73 metres (240 feet).

Brain waves

Many people are reported to experience states of altered consciousness while in crop formations and brain activity tests are frequently conducted to determine these changes. Portable EEG (electroencephalogram) machines compare electrical brain rhythms within crop formations and away from them. Measurements of changes and responses in the body are used to

appraise corresponding changes in mental/emotional state. The basis for this correspondence is empirical – derived from many hours of correlating people's personal accounts and observable responses to the readings given by instruments. The changes are expressed in standardized psycho-physical terms from Max Cade's model: phrases such as 'shift from lethargic towards relaxed and alert'.

The dominant trend when people are inside a crop circle is an increase in activity on the right side of the brain, that is, the emotional and artistic side. This will often manifest itself in dramatic emotional releases: tears, anger, euphoria etc. Also, a response known as 'Alpha blocking' has been identified over many years of research, Alpha being one of the levels of electrical activity in the brain bridging the conscious and subconscious, as if something were not allowing people to connect consciously to their experience. Despite LLG readings showing an unusual pattern of brain activity; and observers noticing a different mode of behaviour, the subjects themselves were unaware of any change. Readings outside the formations reverted to normal.

Crop circles also affect the human hormone system. Suspicions of this were aroused in 1996, after several women reported menstrual problems having visited the 'Julia' set, a wonderful fractal formation opposite Stonehenge. The sex hormones are normally formed by the reproductive glands, the gonads, production being governed by other hormones from the pituitary gland, deep within the brain. As the cortex of the brain is highly sensitive to microwave radiation, the pituitary gland can be affected by exposure to fields of microwave and radio frequency waves, whose origin may be man-made or seismic. This may be an explanation for the use in olden days of sacred areas, such as the Cerne Abbas Giant (Dorset), the Wilmington Long Man (Sussex) and the Uffington White Horse (Berkshire), for fertility rites. These hormonal effects are thought to be related to the seismic and (natural) static energy present.

Tests within crop circles also reveal an unexplained degree of disturbance to the endocrine system. This could be the result of residual forces and subtle energies created by natural sources. Very low adrenalin readings and dramatic alterations to the production of insulin and thyroxine drew attention once more to the workings of the pituitary gland. The pineal gland in the centre of our brain secretes the hormone melatonin, which has a protound influence on our sleep patterns and female sexual cycles. Tests have shown melatonin levels to alter

inside a crop formation.







Left: Longwood Warren, Hampshire (21 July 2001). Crop: wheat. Diameter: c.56 metres (180 feet).

A dream come true

In February 1999, Serena Roney-Dougal, holder of a rare doctorate in Parapsychology, gave a lecture to UNEX (The Unexplained Phenomena Research Society) in which she described the power of the mind and our ability to influence our dreams.

Dr Roney-Dougal pointed out that at about 19.00 hours every night the pineal gland starts working, making melatonin. Shortly afterwards we start to feel sleepy. The gland also makes pinoline, equivalent to the chemical found in the Iawaska vine, a known hallucinogen. Pinoline interacts with another chemical in the brain called serotonin.

About two hours after going to sleep, we will dream. It is now thought that the pinoline interacting with the serotonin takes us into the state of consciousness that we call the dream state which is in tune with the Shamanic or psychic state. Dr Roney-Dougal thus suggests that while dreaming we are hallucinating, and that we can manipulate our dreams, past, present and future being inextricably intertwined.

To test this, the author suggested that UNEX committee members, before going to bed that night should focus on the subject of crop circles, in an attempt to dream about a forthcoming event that would appear in the fields that summer.

That night before going to sleep, the author clearly imprinted the subject of crop circle formations on her mind as the topic of her dream, making a mental affirmation that she would remember and record her dream. The following morning, although the memory of the dream was clear – a straight line of overlapping circles – it was disappointing. Most of the formations over recent years had been of an increasingly complex circular nature, and the real-life occurrence of a straight one seemed unlikely.

However, she telephoned the secretary of UNEX, describing the formation and her dissatisfaction with it, saying that she would try to re-enter the dream the following night and request further clarification or amendment. This did not prove possible, and the memory of it faded until, when flying on an aerial photographic mission in May, she saw the dream formation, new and unreported, lying below her in a yellow oilseed rape field! Correct in every detail, it was stretched out like a string of pearls over a distance in excess of 200 metres (650 feet). Imagine the excitement!

The author believes that the formation was very important in indicating the forthcoming eclipse of 1999, bearing a more than casual resemblance to the transitional process of an eclipse.



Reply from outer space?

Is there a link between crop circles and UFOs? Lights moving in a manner that displays intelligence are often reported as hovering above fields on the night a crop circle appears. Who or what are these intelligences, and where do they come from? As yet there is no clear-cut answer.

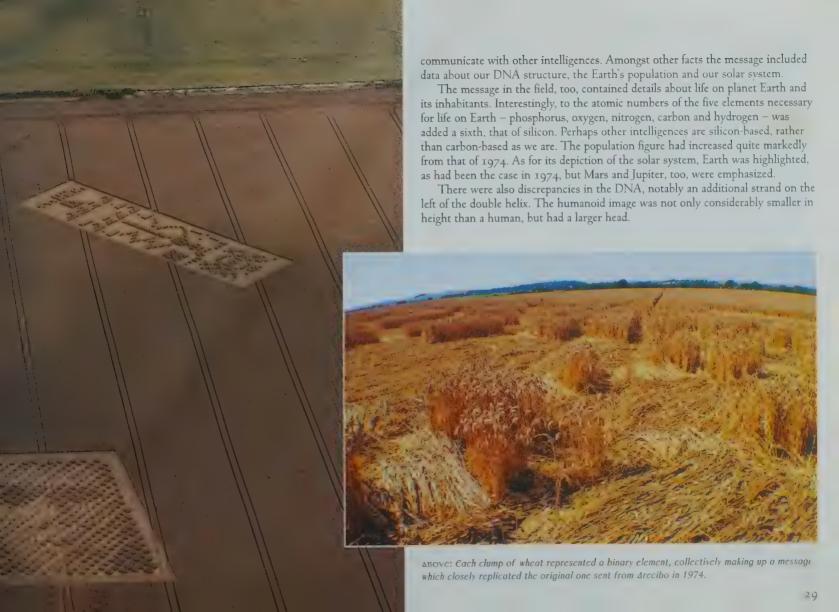
In Hampshire in 2001 and 2002, three strange formations appeared which had many characteristics in common, particularly apparent connections with an external intelligence and a highly innovative appearance.

The first two occurred in a wheat field near Chilbolton (Hampshire) radio station within two weeks of each other in August 2001. The third, the face of an extraterrestrial accompanied by a disk, was discovered in August 2002, in another wheat field at nearby Crabwood, lying in the shadow of radio masts. Could there be an interactive process between the circle-making force and the microwave frequencies given off by radio installations?

The Chilbolton formations consisted of two rectangles, the larger one resembling a computer chip. The second, smaller one at first looked indecipherable. Only when aerial photographs were studied did a 3-D face become startlingly apparent. Many people found it disturbing. Created by subtle shadowing, it appears to be male but could be generic.

The encoded information within the 'chip' echoed very strongly the message sent into space in 1974 by SETI (Search for Extraterrestrial Intelligence) from the radio telescope at Arecibo. Puerto Rico. The 'Arecibo Message' was transmitted in binary form, the universal language for attempting to





An unknown intelligence

In terms of construction and meaning, the Hampshire formations represent a completely new development, in that they appear in the positive: that is, the standing, not the fallen crop determines the pattern.

The Crabwood extraterrestrial face was regarded as equally unsettling in appearance as its Chilbolton counterpart. Many people found it disturbing. With its grid of horizontal lines running throughout, it resembled a computer generated image. The disk, in its highly unusual lay, parallelled the Chilbolton example. The flattened, swirled crop around each standing tuft had been laid individually, a task surely beyond the ability of man within the short hours of darkness in summer. None of the stalks were broken

in either formation; they were bent at the base. One noticeable aspect of the disk was that there was no evidence of a single seed head missing from

any of the standing clumps of wheat inside the circular shape. For people to construct a circle, it is likely that one person would stand at a central point holding a rope while his accomplice would hold the other end to describe the perimeter of the circle. In ripened crop, when the seed-heads are heavy and hanging down against the stem, they are very fragile. Any movement of a tightened rope stretching across the standing wheat will catch against the seed-heads, flicking them off as it passes. Not a single wheat stalk without a seed-head was found.

Researchers found that the circular disk contained a binary code. Linking the binary numbers with the ASCII set of 128 characters, the following message emerges: 'Beware the bearers of FALSE gifts & their BROKEN PROMISES. Much PAIN but still time. (Damaged word). There is GOOD out there. We OPpose DECEPTION. Conduit CLOSING (BELL SOUND)'.

If the Crabwood disk were genuine, we could be dealing with an intelligence far more advanced than previously imagined, an intelligence which is able to by pass universal symbols and interact directly, using our language. Clearly this would bring any communication to a hitherto unknown and advanced level.

Whatever the origin of these formations, they are most impressive in every respect. It would appear that, if man-made, a technology was used that is unknown to all but a few selected people.

image of the face of an extraterrestrial new to a disk was discovered at Crahwood, Hampshire, on 18 August 2002. It sparked off worldwide interest, with UFO devotees arriving from as far affield as Mevica.



pight: Most people are happy to pay farmers for permission to view crop circles.



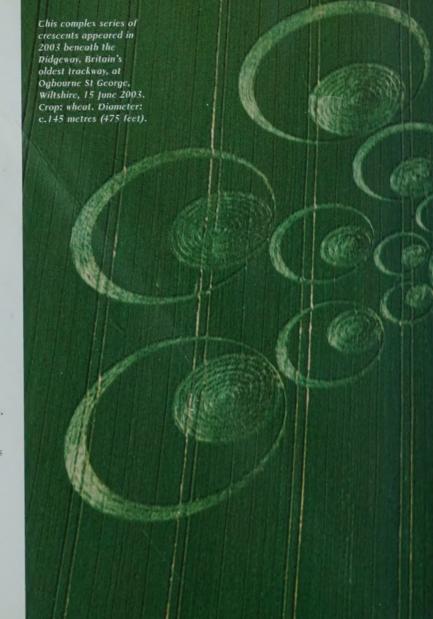
Open verdict

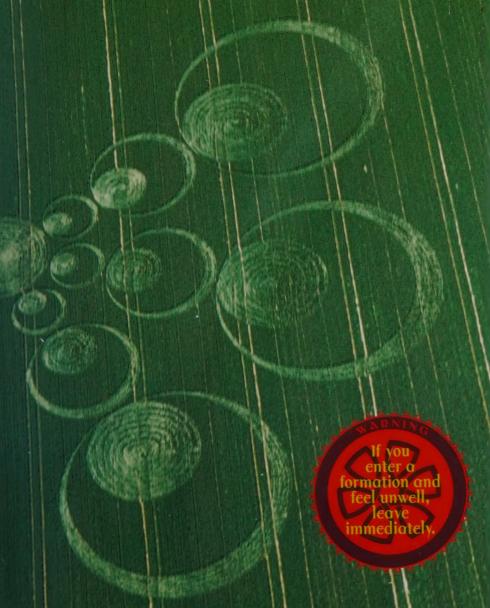
Mathematics, chemistry, biology, music, Celtic history and hieroglyphs of unknown tongues – the languages and symbols of these and more are all to be found in crop circles, often simultaneously. Perhaps the formations are speaking to us in some way.

Crop circles have wit, beauty, elegance, rhythm and form. Perhaps they are a part of some great imaginative project. The sheer beauty and complexity of crop formations leaves little doubt that an intelligence is at work. The nature and origin of that intelligence is a fascinating issue. There are many possibilities: it may come from a far-off galaxy as yet unknown to the human race, it may reside in a parallel world, or it may even be a manifestation of our own subconscious. It may well represent a challenge to our established ways of thought. What is this unknown force, the complex set of subtle energies that performs such miracles in our fields? To many people, any unexplained phenomenon is disquieting.

Whatever the answer, it is evident that these beautiful and enigmatic creations are taking us into previously unexplored areas of research and learning. They also touch the heart as well as the mind, as they lead us into new realms of mystery. That they have acted as a catalyst in bringing together people of all disciplines, races and creeds, could be deemed testament enough of their purpose.

It is not for us to say whether the crop circle phenomenon is within the mind of the Creator. Indeed, not everything can be explained within the existing parameters of science. As Sherlock Holmes says in Conan Doyle's *The Sign of Four*, 'When you have eliminated the impossible, whatever remains, however improbable, must be the truth.'





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BACK COVER: Windmill Hill, Wiltshire (18 July 2002). Crop: wheat. Diameter: c.61 metres (200 feet).



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