

# Mystery of crop-field rings puzzles British researchers

LONDON (AP) — England's crop-field rings have intrigued researchers for a decade.

Neat swirls of flattened crops, 3 to 30 metres (10 to 100 feet) in diameter, show up in the farmlands of southern England each year.

The geometric formations, found amid otherwise undisturbed crops, have yielded many interpretations: electrically charged spinning balls of air, tiny holes in the ozone layer, rutting deer, flying saucers, helicopters flying upside-down, even herds of demented hedgehogs rotating in unison.

Tongue-in-cheek theorists say it would take 40,000 hedgehogs running around at the same time to create the "circle effect."

Hoaxes have been effectively ruled out. If animals are to blame, they leave no trail of bent or broken stems.

Violent storms or whirlwinds don't create the precise patterns of crops crushed flat with the tautness of thatch.

Crops are never damaged and continue to ripen until harvest.

More than 600 of the mysterious configurations have been recorded since 1980 in fields of grass, barley, oats or wheat, as well as in stretches of sand, soil and snow.

Of this summer's 270, two-thirds appeared in a zone 2½ kilometres (1½ miles) square near Avebury in Wiltshire's rural terrain, including 28 in one field.

At first, they were simple circles

## Winds, aliens and animals cited as cause of neat swirls

or had concentric "Saturn" rings. This year, one was ornamented with a long curling tail, like a tadpole's.

Terence Meaden, a physicist, is convinced they are caused by a previously unknown vortex, an inverse "dust devil" that, instead of sucking the surface, slams violently down into it.

Serious research into the circles mystery began in 1980, four years after the first recorded sighting at Headbourne Worthy in Hampshire. Chroniclers have now traced sporadic sightings as far back as 1918, in countries as far apart as Canada, France and Japan.

A circle 4.2 metres (14 feet) in diameter with a 30-centimetre (11 inch) outer ring, appeared one morning this past August on Fred Cullimore's wheat farm near Bath in southwest England.

"It was absolutely perfect; there was no possibility of any animal or person doing it," Cullimore said.

"I've never seriously entertained the idea of little green (space) men," he added. "It's too frightening to think. But I'm not 100 per

cent certain it's storm-related."

In his book *The Circle Effect And Its Mysteries*, Meaden speculates that an unusual atmospheric disturbance generated by winds passing over a hill in south England's undulating landscape creates a spinning ball of air highly charged with electricity.

It eventually plunges downward and leaves its uniform mark, he thinks.

Witnesses have told of a vortex that gives off a humming sound "like the sound you get from electric power lines," and it is luminous at night.

Summer-long attempts to photograph the phenomenon have all been in vain. One group of 50 scientists and engineers armed with high-tech sensors and scanners settled down for a night-long vigil in June and, when dawn broke, discovered an elaborate pattern had formed directly behind their camp.

"It was as though some intelligence was saying, 'So you think you can pin us down!'" said Pat Delgado, co-author with electrical engineer Colin Andrews of another book, *Circular Evidence*.

The rape-seed plant normally "snaps like celery" when bent at the stem, but in this instance, "a softening procedure takes place and I don't know what sort of energy can do that," said Delgado, an electro-mechanical design engineer.