Large Circle Formation: UK, July, 1994

Laboratory Code: KS-02-116

Plant material: Barley plant stems and seed heads, *Hordeum vulgare*

Formation: Large circle around 44 ft. dia with smaller 5 ft. dia, connected by path (see attached sketch by John Holman).

Sample Information: Collected by John Holman, 20 Newton Gardens, RIPON, North Yorkshire, HG4 1QF, UK, in late July- date of occurrence not known. Details are discussed in "Northern England Crop Circle Bulletin No.8, Aug. 94"

Laboratory Results:

There were only three samples from which information could be obtained. The termination of embryo growth (lack of seed development) in the formation plant heads was typical of altered embryo development observed within numerous formations previously examined. In barley there is often an associated reduction in the length of the bracts when the seeds do not form. We find the same situation in these plants as shown in the data listed below. Also listed are the node expansion levels obtained from the apical position. All data given in mm.

	Mean Bract Length			Change	Mean Node Length			Change
Sample	Ave.	sd	N	%	Ave.	sd	N	%
Control	7.67	0.63	20	------	4.14	0.28	10	------
Large Cir.	6.99	0.82	20	-8.9	*4.62	0.60	18	+11.6
Standing	*6.73	0.46	14	-12.3	Insufficient Node Samples			

P<0.05

Comments:

The absence of seeds and the significant reduction in bract growth, clearly indicates that this formation occurred at the time of anthesis. As pointed out on page 357 in *Physiologia Plantarum* Vol.92, 1994, the early termination of embryo development is one of the most consistent and unusual aberrations associated with crop formations. Just to reinforce this point, the laboratory reports in which we have discussed severe reduction in embryo growth, are listed in chronological order, beginning at the inception of this study.

REPORTS DISCUSSING EMBRYO GROWTH REDUCTION

Report #1 Feb. 24, 1991, wheat, England
Report #2 Aug. 2, 1991, barley, England, Somerset
Report #5 July 10, 1992, wheat, USA, Pennsylvania
Report #7 Sept. 21, 1992, barley, England, Barbury Castle
Report #12 Nov. 21, 1992, sweet corn. USA, Ohio
Report #13 Nov. 25, 1992, wheat, Canada, Saskatchewan
Report #17 June 27, 1993, wheat, USA, Washington
Report #20 Dec. 4, 1993, soybeans, USA, Iowa
Report #21 March 26, 1994, wheat, England, Devises
Report #22 July 17, 1994, wheat, England, West Sussex

Another important aspect related to all the above reported cases of embryo cessation, is the fact that the somatic tissues (non-reproductive) continue to develop in a normal manner. As far as we are aware there is no other situation of severe, radiation suppressed development changes in which the embryo is drastically affected, whereas the remainder of the plant develops normally. This developmental inconsistency seems to be unique with crop formations and should not be ignored when considering important transformations occurring within the confines of the energy signatures.

Please Note: Editors of Crop Formation Bulletins.
The scientific journal, *Physiologia Plantarum* is an INTERNATIONAL JOURNAL FOR EXPERIMENTAL PLANT BIOLOGY. It should not be referred to as a "Dutch" journal. It has a North American Editorial Office and world wide circulation. It deals with research from molecular and cell biology to the biophysics, biochemistry and ecophysiology of plant systems.

W.C. Levengood
Pinelandia Biophysical Lab.

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Fig 1,

CENTRE FOR CROP CIRCLE STUDIES
YORKS & HUMBERSIDE BRANCH

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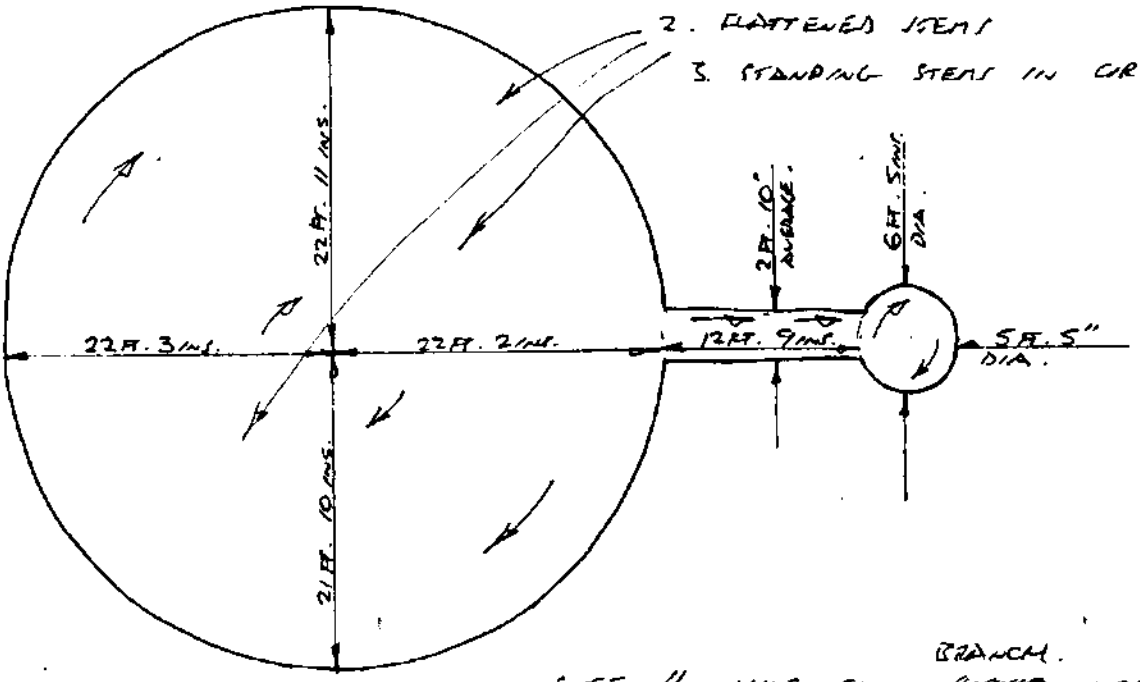
SAMPLES FROM JOHN HOLMAN 3 BUNDLES

1. CONTROLS. -VARIOUS POINTS AROUND CIRCLE
2. FLATTENED STEMS
3. STANDING STEMS IN CIRCLE (SMALL BUNDLE)



SITE ½ MILE FROM [redacted] MEETING PLACE! BRANCH.

CROP FORMATION AT ACASTER MALBIS NEAR YORK, NORTH YORKSHIRE U.K.

FOUND [redacted] END OF JULY 1994. DATE OF OCCURRENCE NOT KNOWN.

FORMATION NOT VISIBLE FROM ROADS OR ANY POINT NEAR BY.

CROP BARLEY:: TOP LAYER SEED HEADS IN MAIN CIRCLE AFFECTED HEADS BECAME NORMAL (PROGRESSIVELY) AWAY FROM CIRCLE DOWN AVENUE. HEADS UNDERNEATH AFFECTED HEADS BECAME NORMAL.

[redacted] ALL STANDING STEMS IN CIRCLE HAD AFFECTED HEADS. (SMALL SAMPLE BUNDLE)

NONE OF STANDING ITEMS AROUND CIRCLE HAD BEEN AFFECTED.