

Crop Formation at Gaston, Oregon, July 1994**Laboratory Code: KS-02-63**

Plant material: Wheat plants with seed heads, *Triticum aestivum*.

Formation: Approximate 66 ft. circle with a central standing ring surrounding a downed epicenter. Formed around July 2, 1994. See attached diagram prepared by Ms. Carol Pedersen, for details.

Sampled by: Carol Pedersen, 20075 S.W. Imperial St., Aloha, Oregon 97006, on July 26, 1994.

Laboratory Results:

The results of a detailed stem node analysis are listed in table I.

Table I. Stem Node Analyses at Apical-N4 Location

| <u>Sample Group</u> | <u>Node Length</u> | | | <u>NI-change</u> | <u>Expulsion Cavities</u> |
|---------------------|--------------------|-----------|----------|------------------|---------------------------|
| | <u>ave.</u> | <u>sd</u> | <u>N</u> | | |
| Controls- A,B,C,D | 4.00 | 0.39 | 31 | ----- | 0% |
| D-standing | 4.48* | 0.62 | 10 | +12.0% | 0% |
| F-downed | 6.28* | 0.61 | 16 | +57.0% | 56.3% |

*- P<0.05

The seedling growth data at the 7-day development stage are summarized in Table II.

Table II. Seedling Growth Analyses

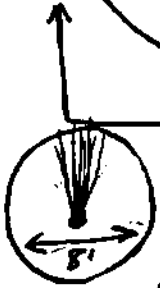
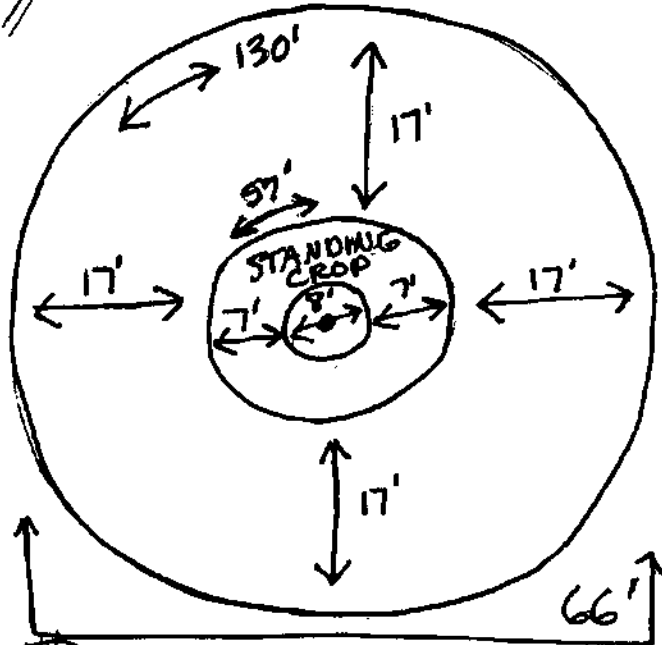
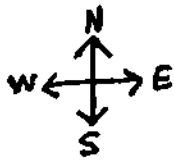
| <u>Samples</u> | <u>Seedling ht.-cm</u> | | | <u>Growth Change</u> |
|------------------|------------------------|-----------|----------|----------------------|
| | <u>Ave.</u> | <u>sd</u> | <u>N</u> | |
| Controls A,B,C,E | 7.57 | 2.12 | 80 | ----- |
| D-standing | 7.18 | 2.01 | 19 | -5.2% |
| F-downed | 6.20 | 2.53 | 20 | -18.1% |

Comments:

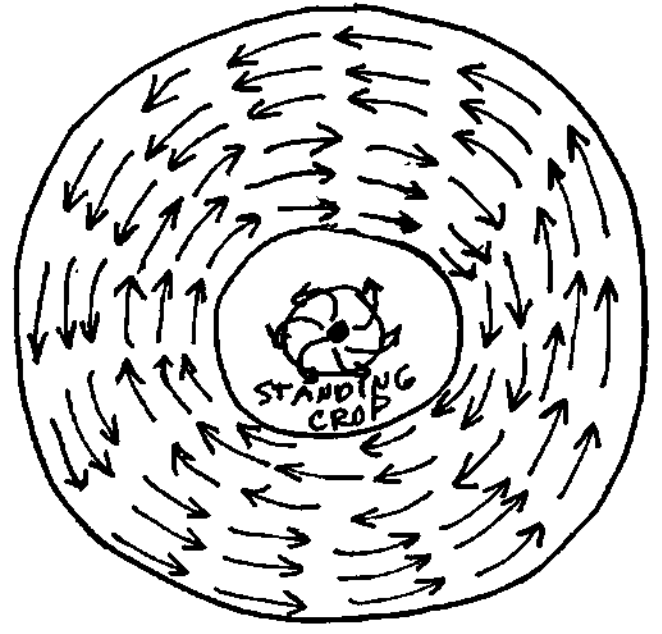
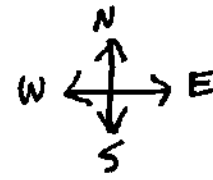
The plant node expansion (Table I.) and the seed growth alterations (Table II.) are very similar to those found in the West Union, Oregon, formation, and discussed in report No.26. It is very important to note that in both formations the significant growth suppression in the seeds, occurred at the same sampling location where the node expansions and expulsion cavities were also significantly higher than the controls.

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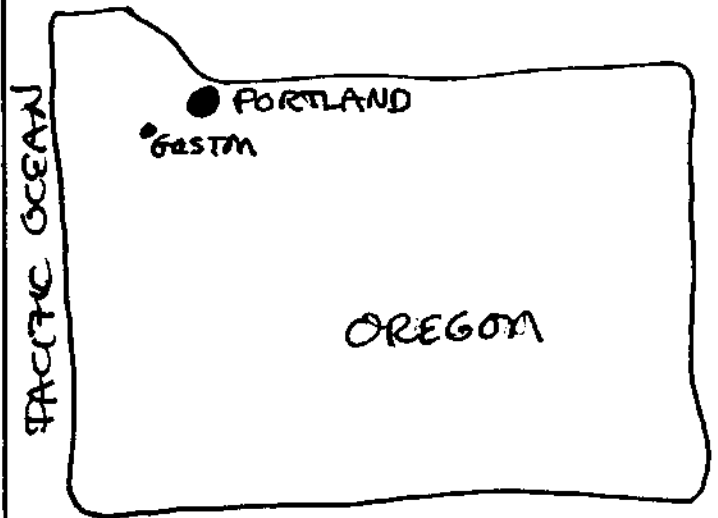
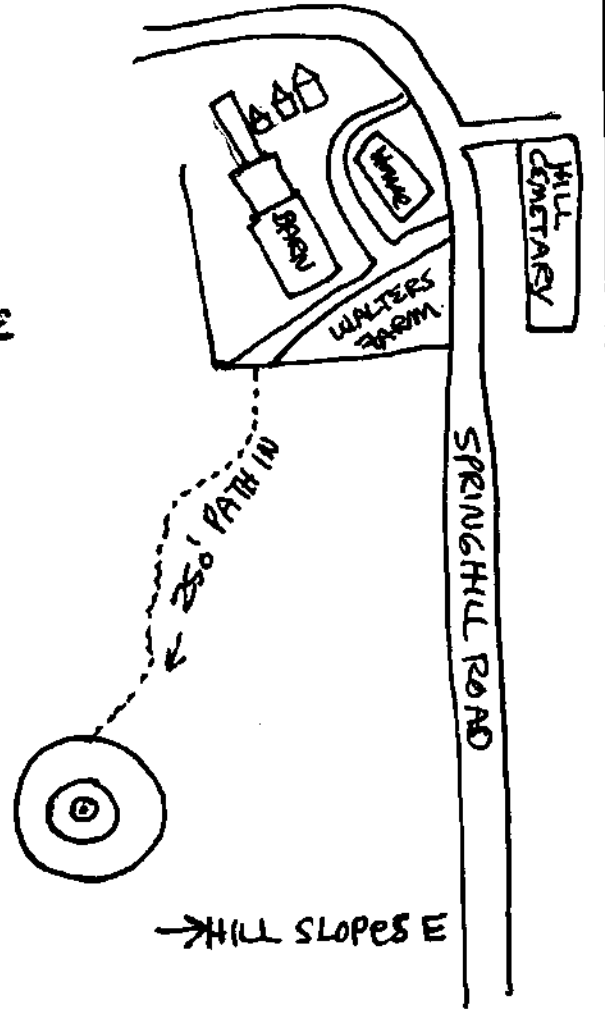
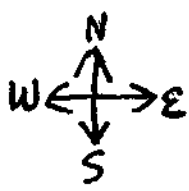


CENTER
 9 stalks standing crop
 APPROXIMATE MEASUREMENTS



Flow Chart
 HALF CIRCLE counterClockwise
 HALF CIRCLE CLOCKWISE
 CENTER CIRCLE counter
 CLOCKWISE
 9 STALKS STANDING CROP
 AT CENTERPOINT

GASTON ←



GASTON CIRCLE
 GASTON, OREGON
 USA

MS-02-63