

GENERAL REMARKS

Kindly insert here notes on conditions of stock, crops, insect, or bird life, growth and flowering of plants, and general characteristics of season

The main feature of the month was the heavy summer hail storm on 21st.

Approaching slowly from the south a severe S. squall developed from the storm line and was accompanied by very large irregular and jagged hail stones. Many of the stones were conglomerates of many stones frozen together and the largest was measured at 2 inches in length and up to 1-1/2 inches thick.

Such hail driven by the severe squall, which blew down one barn on the College, cut through crops like a knife. Crops particularly hit were cereals and seed crops close to harvest and trials on tomatoes and sweetcorn in the research areas. Pip fruit in the horticulture research area was 100% affected and probably 30-50% so badly smashed as to be unsaleable. It was fortunate that strawberry picking had finished the morning of the storm.

Further, vivid thunderstorm activity continued into the next morning with a total rainfall over the period of 0.50 inches.

In general, farming has been hindered by dampness. Although rainfall was not much above average there were no long periods of dry N.W. conditions for harvesting and frequent dampenings kept moisture levels high.

The absence of frequent hot drying conditions has meant more greenness in the paddocks than usual and animal health is excellent. In the horticultural world the hail storm made it a bad month and dampness on top of plant damage has meant more attention to fungicidal spraying of all crops than usual.

Irrigation has also been extensively used. Very high numbers of spring tails were about following the storms.

BEAUFORT LETTERS AND SYMBOLS FOR RECORDING WEATHER PHENOMENA

1. APPEARANCE OF SKY—

- b Blue sky (cloud amount 0, 1 eighths).
- bc Partly cloudy (" " 2, 3, 4 ").
- c Cloudy (" " 5, 6, 7 ").
- o Overcast (" " 8 ").
- g Dull, gloomy.
- u Ugly, threatening sky.

2. PRECIPITATION—

- p Showers of rain.
- r₀ Light rain.
- r Moderate rain.
- r₂ Heavy rain.
- d Drizzle.
- h Hail.
- s Snow.
- rs Sleet (rain and snow together or partly melted snow)
- ps Showers of snow.

Other less common phenomena should be reported in full, for example:—

- Shallow (or ground) fog.
- Frost fog.
- Dust devil.
- Glazed frost.
- Rime.
- Snowdrift.
- Snow lying (more than half the country in sight covered with snow).

3. WIND—

- ☙ Gale (Force 8 or above).
- q Squalls.

4. ELECTRICAL PHENOMENA—

- t Thunder
- l Lightning.
- tl Thunderstorm.

5. ATMOSPHERIC OBSCURITY—

- f Fog.
- m Mist.
- z Haze or smoke haze.
- v Abnormal visibility.
- y Dry air (relative humidity less than 60 per cent.).

6. GROUND PHENOMENA—

- w Dew.
- x Hoar frost.

- Solar corona.
- Solar halo.
- Lunar corona.
- Lunar halo.
- Rainbow.
- Aurora.
- Mirage.
- Zodiacal light.

The exponents 0 or 2 applied to symbols indicate respectively light and heavy. Thus r₂ indicates heavy rain and r₀ light rain. The letter j is used to denote occasional or intermittent phenomena. Thus jr indicates intermittent rain. Similarly j is used for phenomena not occurring at the observer's station but visible from it; jp, for example, denotes showers visible in the distance.

BEAUFORT WIND SCALE

| Beaufort No. | Explanatory Titles | Specification of Beaufort Scale for Use on Land | LIMITS OF VELOCITY | |
|--------------|--------------------|--|--------------------|-------------|
| | | | Miles per Hour | Knots |
| 0 | Calm | Calm; smoke rises vertically | Less than 1 | Less than 1 |
| 1 | Light air | Direction of wind indicated by smoke drift, but not by wind vanes | 1-3 | 1-3 |
| 2 | Slight breeze | Wind felt on face; leaves rustle; ordinary vane moved by wind | 4-7 | 4-6 |
| 3 | Gentle breeze | Leaves and small twigs in constant motion; wind extends light flag | 8-12 | 7-10 |
| 4 | Moderate breeze | Raises dust and loose paper; small branches moved | 13-18 | 11-16 |
| 5 | Fresh breeze | Small trees in leaf begin to sway, wavelets form on inland waters | 19-24 | 17-21 |
| 6 | Strong breeze | Large branches in motion; whistling heard in telegraph wires; umbrellas used with difficulty | 25-31 | 22-27 |
| 7* | Near gale | Whole trees in motion; inconvenience felt when walking against wind | 32-38 | 28-33 |
| 8 | Gale | Breaks twigs off trees; generally impedes progress | 39-46 | 34-40 |
| 9 | Strong gale | Slight structural damage (chimney pots and slates removed) | 47-54 | 41-47 |
| 10 | Storm | Seldom experienced inland; trees uprooted; considerable structural damage occurs. | 55-63 | 48-55 |
| 11 | Violent Storm | Very rarely experienced; accompanied by widespread damage | 64-72 | 56-63 |
| 12 | Hurricane | | Above 72 | Above 63 |

*For the purpose of statistical summaries winds of force 7 are not regarded as gales. (The velocity equivalents refer to a height of approximately 10 metres above level ground free from obstruction.)

INTERNATIONAL SCALE OF VISIBILITY

| Distance at Which Standard Object is Visible | Code Number | Description |
|--|-------------|--------------------------------------|
| Less than 50 yds. | 0 | Dense fog. |
| 50 yds. | 1 | Thick fog. |
| 200 yds. | 2 | Fog. |
| 500 yds. | 3 | Moderate fog. |
| 1,000 yds. | 4 | Mist, haze, or very poor visibility. |
| 2,000 yds. | 5 | Poor visibility. |
| 2 1/2 miles | 6 | Moderate visibility. |
| 6 miles | 7 | Good visibility. |
| 12 miles | 8 | Very good visibility. |
| 30 miles | 9 | Excellent visibility. |