

## JANUARY 1935, ABNORMALLY FOGGY AT BOISE, IDAHO

By H. G. CARTER

[Weather Bureau, Boise, Idaho, February 1935]

The average number of days with dense fog at Boise during the past 34 years has been 7 each year, occurring during the winter months. January 1935 will go on record as the foggiest January since the beginning of Weather Bureau records. There were 8 days on which dense fog was recorded during the month, followed by a dense fog on February 1.

During January 1935 dense fog prevailed 71 hours and 30 minutes, or 9.6 percent of the time. In addition to this dense fog, there were 54 hours and 20 minutes of light fog, making a total of 125 hours and 50 minutes (16.9 percent of the time) when either light or dense fog was recorded.

The period of record breaking foggy weather began at midnight of the 26-27th; and dense fog continued at frequent intervals until 8:15 a. m., February 1. During this period there were recorded 73 hours and 20 minutes (57 percent of the time) with dense fog, and 38 hours and 50 minutes (30 percent of the time) with light fog, making a total of 110 hours and 10 minutes when fog, either light or dense, was recorded. This was a total of 87 percent of the time.

The longest periods with continuous dense fog were as follows:

From 5:30 p. m. of the 29th to 11:30 a. m. of the 30th, 18 hours;

From 4:30 p. m. of the 30th to 8:30 a. m. of the 31st, 16 hours;

From 5:30 p. m. of the 31st to 8:15 a. m., of February 1, 14 hours and 45 minutes;

From 4:30 p. m. of the 28th to 7:15 a. m. of the 29th, 14 hours and 35 minutes;

From 10 p. m. of the 27th to 2 a. m. of the 28th, 4 hours.

From 9 p. m., January 25 to 9:30 p. m., February 6, there were a total of 169 hours and 45 minutes with light fog and 73 hours and 20 minutes with dense fog, making a total during slightly more than 12 days, of 243 hours and 5 minutes when either light or dense fog prevailed. This was 84 percent of the time.

During the periods of dense fog, from midnight of January 26-27 to 8:15 a. m., February 1, city traffic was considerably retarded; while minor collisions were frequent, no serious accidents were reported. Rail and air-line schedules were disrupted, but no accidents occurred.

## WEATHER OF ONE SEASON AS AN INDICATION OF THE WEATHER OF THE FOLLOWING SEASON, OR SEASONS, AT BOISE, IDAHO

By H. G. CARTER

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There seems to be a firm belief in some localities that the weather of one season is a reliable indicator of the weather of the following season, or seasons.

On coming to Boise in the autumn of 1932 the writer was impressed with the frequent assertions of old residents that the weather of the coming season at Boise could be accurately foretold from the weather of the present season.

In order to check the accuracy of this popular belief, and to be prepared to intelligently answer queries pertaining thereto, a study was made of the Weather Bureau temperature and precipitation records for Boise, which began in 1868. The study was further stimulated by the importance of the fire-weather work in southern Idaho.

All seasons with plus temperature departures were classified as warm, all with minus departures as cold, all with plus precipitation departures as wet, and all with minus departures as dry, in every case disregarding the amount of the departure.

No conclusive evidence was found that the weather of one season was an indicator of the weather of the following season or seasons. In a few cases, however, there appeared to be some slight relation. The most marked instances are:

- 28 wet autumns were followed by 21 dry summers.
- 38 cold summers were followed by 27 dry springs.
- 28 wet winters were followed by 20 dry springs.
- 37 warm autumns were followed by 26 dry summers.

It was thought that an error might have been introduced by the disregard of the amounts of the departures.

For example, a season with a plus temperature departure of 0.1° was placed in the warm column, although in reality the season was not what would be considered warm.

Tabulations were, therefore, again made, designating as warm or cold only such seasons as had a plus departure of 2° or more, and a minus departure of 2° or more, respectively. Seasons with precipitation of 50 percent of normal or less were classified as dry, and those with 150 percent of normal, or more, as wet. While this greatly reduced the number of seasons available for comparison, it was thought the larger departures would afford more reliable comparisons. A number of instances were found in which there appeared to be some relation. For example:

- 6 dry springs were followed by 5 dry summers.
- 8 wet springs were followed by 6 warm autumns.
- 12 warm summers were followed by 9 dry autumns.
- 12 warm summers were followed by 10 warm autumns.
- 12 warm summers were followed by 9 warm winters.
- 16 cold summers were followed by 12 dry winters.
- 15 wet autumns were followed by 12 dry summers.
- 4 wet winters were followed by 3 dry springs.
- 4 wet winters were followed by 4 warm springs.
- 4 wet winters were followed by 3 dry summers.
- 4 wet winters were followed by 3 wet autumns.
- 4 wet winters were followed by 3 warm autumns.

Seasons with marked departures may give some indication of future weather, but in most cases it is too uncertain to be used as the basis for long-range forecasts.