

## METEOROLOGY

# Extreme Cold Engulfs U.S.

The bitter cold of January, although extreme, was not as severe as the great cold wave of February 1899 when many records still unbroken were set, Ann Ewing reports.

► THE BITTER COLD wave engulfing virtually all of the United States in January brought record low temperatures to many locations, mostly in the Southeast and Ohio Valley regions.

However, the cold this January is not as severe, except for a relatively few local areas, as the great cold wave of February 1899. That winter, new record low temperatures were set over a large part of the mid-continent area and the Southeast, with many of these records still standing.

The new below zero lows, set Jan. 24, include: Nashville, Tenn., 15 below; previously, 13 below in February 1951. Asheville, N. C., 7 below; previously 6 below in February 1899. Lexington, Ky., 21 below; previously 20 below in February 1899. Cleveland, Ohio, 19 below; previously 17 below in January 1873. Cincinnati, Ohio, 19 below; previously 17 below in January 1936. Toledo, Ohio, 17 below; previously 16 below in February 1899 and January 1897.

The brutal cold wave also broke some records for the lowest temperatures ever recorded during January, including:

Chattanooga, Tenn., 7 below; tying with 1886; all-time low 10 below.

Atlanta, Ga., 3 below; previously 2 below in January 1886; all-time low 9 below in 1899.

Birmingham, Ala., 2 below; previously 1 above in January 1940; all-time low, 10 below in February 1899.

Pittsburgh, 18 below; previously 16 below in January 1936; all-time low, 20 below in February 1899.

The extreme cold of January 1963 was the second great cold wave of the 1962-1963 winter. The first came Dec. 12 and 13 when new December low temperatures were set in the South, including an all-time record of 18 degrees at Tampa, Fla.

Two cold waves of the severity of the December one and the January one are rare, records at the U. S. Weather Bureau's office of climatology show.

Although it is too early to be certain, the 1962-1963 winter so far does not seem to rival the severe cold of the winter of 1936 in the north central interior of the country, which includes the upper Mississippi Valley.

In the western plains and far western states, the cold this winter is neither as severe nor as persistent as in the winter of 1948-1949, and the snow cover is not as deep. That was the winter of the famous haylift, when livestock perished by the thousands.

Other cold Januaries in the eastern U. S. occurred in 1940 and 1918, the latter being particularly harsh for the Ohio Valley region.

Although the January cold wave set some new record lows, the snow was deeper and the extreme cold more persistent in 1918, when Indiana and Ohio and parts of sur-

rounding states experienced the worst blizzard on record.

The December cold wave record lows, set on the 13th, included Montgomery, Ala., 5 degrees; Daytona Beach, Fla., 21 degrees; Jacksonville, Fla., 12 degrees; Savannah, 9 degrees; Chattanooga, Tenn., 2 degrees, and Nashville, Tenn., 7 degrees. The cold then moderated until the last two days of December, when Maine, New Hampshire and Vermont were struck with a blizzard.

Unlike the historic winters of 1873, 1899, 1918 and 1936, weather in the current winter season has warmed up between the severely cold waves.

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## Cold Breaking Some Records But Not Snow

► THE BRUTALLY COLD wave freezing much of the country is breaking low temperature records but not snowfall extremes.

Record for the snowiest season in the 50 states is held by Paradise Ranger Station on the southern slope of Mt. Rainier in Washington, where 1,000.3 inches fell in the winter season of 1955-1956. Runner-up is Thompson Pass, Alaska, with 974.4 inches in 1952-1953.

Third place goes to Tamarack, Alpine County, Calif., where 884 inches fell in 1906-1907, making it the season record holder for a long time. Tamarack still holds the record for snowfall in one month—390 inches in January 1911.

Other places accumulating more than 600 inches of snow a season are Crater Lake, Ore., 879 in 1932-1933; Alta, Utah, 663 in 1951-1952; and Ruby, Colo., 644 in 1894-1895.

Even the southern part of Florida has seen snow, flakes having flown in the air as far south as Fort Myers on Feb. 13, 1899, during the greatest of all modern polar outbreaks to penetrate the southern peninsula. However, no snow has ever been reported at Palm Beach, Miami or Key West, records at the U. S. Weather Bureau indicate.

In second place behind Tamarack for the snowiest month is Paradise Ranger Station, with 363 inches in January 1925. Third place is held by Thompson Pass, with 297.9 in February 1953, which also holds the record for the heaviest amount of snow in a single storm (175.4 inches from Dec. 26-31, 1955) and in 24 hours (62 inches on Dec. 29, 1955).

For Florida, the 24-hour, single-storm, month and season records are all held by Milton Experiment Station in the northwestern section—four inches of snow on March 6, 1954.

Measuring the amount of snowfall is difficult and determining extreme depths is also difficult. Because there are not a sufficient number of weather stations in the most snowy areas and because snowy areas of the U. S. are only thinly populated, it is likely that the biggest snowfall of all times has gone unobserved and unmeasured.

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**ANTARCTIC EXPLORERS**—Dr. Laurence Gould (left) a veteran Antarctic explorer, and Rev. Theodore M. Hesburgh, C.S.C., University of Notre Dame president, are shown on an inspection tour of U.S. scientific research stations in the south polar region. Dr. Gould was chief scientist on Admiral Byrd's first Antarctic expedition in 1928.