

WARNINGS FROM OTHER DISTRICTS.

Chicago Forecast District.—The frequent movement of well-marked storms over the district continued during the month of April. The storms were unusual, both in frequency and in intensity, for the season of the year. They were accompanied by considerable precipitation and, as their tracks were well to the south, the temperature was for the most part considerably below the monthly normal.

The month opened with the passage of a severe storm over the southern and eastern portions of the district, and this was immediately succeeded by another which passed from the middle Rocky Mountain region directly eastward, taking an even more southerly course than its predecessor.

Both of these storms were accompanied by widespread precipitation and abnormally large snowfalls, many stations reporting amounts exceeding the previous April record. On the 4th and 5th several stations reported minimum temperatures, also breaking the April record.

At the beginning of the month vegetation had not developed sufficiently in the district to call for frost warnings, except in the more southerly sections. On the 1st advices for freezing temperatures were sent to Kansas and western Missouri, and on the 2d to the entire States of Kansas and Missouri, and warnings of frost to southern Illinois.

On the 3d a cold-wave warning was sent to southern Kansas, and on the morning of the 4th warnings of frost or freezing temperature to Missouri, Kansas, and extreme southern Illinois.

On the night of the 1st a warning of impending gale with squalls was phoned to local shipping interests on Lake Michigan, supplementing the general advisory message for the Lake issued from Washington. Another warning was issued to local shipping interests on the night of the 3d and the morning of the 4th.

On the morning of the 3d advices to live-stock interests were sent to the States of Kansas, Nebraska, and west Missouri, and special cold-wave warnings to southern Kansas. All these special forecasts for low temperature and stormy conditions were fully verified.

On the morning of the 10th another storm was apparently developing in the Plateau and Rocky Mountain regions promising a repetition of the severe conditions which prevailed the previous week. Advices to live-stock interests were immediately wired to points in the States of Wyoming, South Dakota, and the northern portions of Nebraska and Kansas, and these undoubtedly proved timely as the snow was heavy and the gales were strong from the north with falling temperature. On the night of the 10th warnings were issued to vessel interests on southern Lake Michigan in conformity with a message from Washington for strong easterly winds with rain or snow.

On the morning of the 11th cold-wave warnings were issued to Kansas and points in western Missouri, but these failed of verification, except in western Kansas, because of the unusually rapid movement eastward of the disturbance. At the same time heavy-snow warnings were issued for several points in the middle West, but the precipitation which was largely in the form of heavy snow in the Central Plains States was in the form of rain in the sections farther east. This storm took a course directly eastward over southern Missouri and the Ohio Valley.

On the morning of the 12th warnings for frost or freezing temperature were sent to the States of Illinois,

Missouri, Kansas, and Nebraska, and on the morning of the 13th warnings of frost to Illinois and eastern Missouri, and these were fully verified.

Another storm developed in the far West on the 15th-16th, and advices to live-stock interests were sent to Wyoming on the morning of the 16th and to Nebraska and Kansas on the morning of the 17th. Severe conditions also attended the movement of this storm and doubtless the warnings were quite timely.

Warnings of frost or freezing temperature were again sent to the States in the southern and central portions of this district on a few days during the balance of the month, and these were justified as shown by ensuing conditions.

Advices to live-stock interests were issued to points in Montana and Wyoming on the 28th, and to Wyoming and Nebraska on the 29th, in advance of falling temperature with northerly winds and rain turning to snow.

A special effort was made during the month to keep live-stock interests fully advised as to cold, wet weather, whether with snow or rain, because of the lambing and shearing season.—*H. J. Cox.*

Denver Forecast District.—The month was unusually cold in the northern and eastern parts of the district. Three storms of marked intensity crossed the district during the month. The first of these was followed by remarkably cold weather for the season on the eastern slope, and the loss of the fruit crop in the Pecos Valley in eastern New Mexico. The storm reached the Texas Panhandle on the morning of the 3d, with increasing intensity. Cold-wave warnings were issued for eastern New Mexico and much colder weather predicted for Colorado. Live-stock warnings were issued for eastern Colorado and northern New Mexico. The cold-wave warning was verified in eastern New Mexico, an unprecedented freeze occurring in the Pecos Valley. At Roswell the remarkably low temperature reading of 18° above zero was recorded and the temperatures in eastern Colorado ranged from zero to 10° above zero. The second storm crossed the district at the end of the first decade and resulted in freezing temperatures in a large area for which warnings had been issued. The storm that was central in southeastern Colorado on the morning of the 17th was unusually severe in eastern Colorado for the time of the season. The live-stock warnings issued for eastern Colorado on the morning of the 17th were timely as freezing temperatures and heavy snows covered nearly all of Colorado during the following 24 hours. Live-stock warnings were extended to cover eastern New Mexico on the evening of the 17th and the morning of the 18th, but the resulting weather conditions were not so severe in that State. Freezing temperature warnings were also issued for large areas on several other dates and were generally verified.—*Frederick W. Brist.*

New Orleans Forecast District.—Conditions were more intense than is usual during April. A number of barometric depressions, moving far southward before they turned to the east or northeast, passed over the district and were followed by short periods of unseasonably cold weather.

Northwest storm warnings were issued for the Texas coast on the morning of the 4th because of a disturbance that was passing eastward, followed by considerably higher pressure. The warnings were fully verified on the east coast of Texas but not on the west coast, and were ordered down at 8.30 p. m.

Unusually low barometer was charted over the west Gulf States on the 8 p. m. map of the 17th, the center of