

A Science Service Feature

Released upon receipt
but intended for use
January 7, 1935

? WHY THE WEATHER ? Mailed Dec. 31, 1934

SOME EFFECTS OF CHINOOK WINDS

By Charles Fitzhugh Talman
Authority on Meteorology

Some striking effects of chinook winds were described many years ago by E. J. Glass, of the U. S. Weather Bureau, as follows:

"Along the eastern slope of the Rocky Mountains in winter, with a temperature below zero and the ground covered with snow, a peculiar moaning or whistling sound is most welcome to the ear. This sound acts like magic on its hearers. It causes the business man to lose a moment in his calculations, the clerk to pause in his routine, and the stockman to listen intently.

"This wind is more welcome to stockmen, perhaps, than to any other class of business men. The stockmen know that the high velocities which generally characterize these winds will first blow the snow from the hills and high ground into the ravines, then the temperature will rise, usually above 40 degrees, and occasionally above 50 degrees, and clear the ranges so that the stock can find food.

"The snow is drifted by the chinooks into the deep canyons and ravines. It is slightly melted on the surface by the warmth of the wind, and the water percolating slowly downward gradually converts the mass into solid ice. Unless these drifts be solidified by the thawing and freezing process they cannot be depended on for summer use. Thus chinooks serve a useful purpose in the storage of the snow that supplies the water to our rivers during the summer season. The solidification of the snow by the chinook winds, by rendering rapid thawing impossible, prevents the destructive spring freshets in streams and rivers that sometimes occur when the snow lies undrifted over the hills and plains."

(All rights reserved by Science Service, Inc.)

SCIENCE SERVICE
21st and Constitution Ave.
Washington, D.C.