

No. 244

Science Service Feature

Feb. 22.

? WHY THE WEATHER ?

Dr. Charles F. Brooks
of Clark University

Tells How

SNOW BLANKET ALLOWS GROUND TO THAW

As the winter grows old the snow blanket permits the frost to come out of the ground beneath it, even while the soil of exposed ground remains solid. The snow acts as an efficient insulator to keep in the heat which is escaping to the surface from lower ground levels, and this heat serves to melt the frost, so that after a long period of snow-covered earth we find at the final melting that there is no frost whatever in the ground.

This absence of frost has an important influence in preventing spring floods. The water of the snow melting in the warm sunshine of approaching spring is absorbed freely in the soil. As a result pastures and lawns may emerge from the snow cover verdant with young grass.

This action of the snow is not well understood, even by many of the amateur meteorologists who delight in prophesy. It combines with other influences, among them the action of the snow-fields in maintaining cold air over them, thus deflecting storms southward, to prevent what otherwise would be devastating spring floods. In March, 1916, when the northeast lay buried deep in snow a local weather seer gave public warning of dangerous floods and offered his own hill as a refuge to the fleeing people, as he pictured them. But when the final melting came, there was no flood. Instead, the countryside was exposed, fresh and green, its soil stored deep with the waters of the snow which had covered it.

(Tomorrow: Rain Melts Little Snow)

All rights reserved by Science Service.

SCIENCE SERVICE,
1115 Conn. Ave.,
Washington, D.C.