

A Science Service Feature

? WHY THE WEATHER ?

Dr. Charles F. Brooks,
Secretary, American Meteorological Society
says:

BEWARE LATE SPRING FROSTS

Late spring frosts are not uncommon in the northern United States, and sometimes cause heavy loss to market gardeners and orchardists, as well as doing damage to the flower gardens. Although the nights of spring are shorter than those of autumn and therefore present less opportunity for cooling to the frost point before morning, the ground and the air aloft are both colder in spring, and the air is drier than in autumn. The more rapid cooling which occurs in consequence compensates for the shortness of time.

While it is the low temperature that kills, frost is what we see. It differs little from frozen dew. When the air temperature falls below the dewpoint the temperature of the ground and vegetation is low enough to cause the formation of tiny ice crystals instead of water particles. It is the bright afternoon, followed by the still night with a clear sky, that offers the threat. Then is the time to cover vegetation with something, if it is only a newspaper, not to keep the frost out, as the saying is, but to keep the heat in by checking radiation from the ground and leaves. In the same way a smoke screen serves as protection against frost, taking the place of the cloud in curbing radiation, and this form of protection has come to be used widely in orchards when fruit buds are in danger. But orchard heating rather than orchard smoking is usually preferred, though the smoke and the heat operate to the same end.

(Tomorrow: May may backslide.)