
THE INFLUENCE OF SNOW ON GROUND TEMPERATURES

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Snow influences temperatures within the snowpack and soil temperatures. Air temperatures may be well below freezing but temperatures within the snowpack and at soil surface will be near 0 °C (32 °F). When there is fall green-up and snow covers the vegetation before cold temperatures occur (less than – 5 °C or 23 °F), the native forage may stay green into January. With soil surface temperatures near freezing under snow packs that exceed about one meter, organisms can survive extremely cold winter air temperatures. Air temperatures can affect snow consistency as the seasons snowpack is being deposited which can affect foraging and animal movement. Relationships between air temperature, snow temperature and soil temperatures will be presented.