

Winter Injury

The frequency and severity of winter damage can be determined by a number of factors, including the type of plant, location, and the exact timing of weather extremes during the dormant period. Plant damage can result more often from extreme temperature fluctuations, rather than a long, cold winter.

TEMPERATURE FLUCTUATION

Plants that are dormant yet not fully acclimated to harsh weather conditions can be stressed or injured by a sudden, hard freeze. Rapid or severe drops in temperature following mild autumn weather cause injury to woody plants. Extended periods of mild winter weather can de-acclimate plants, again making them vulnerable to injury from rapid temperature drops.

LOW TEMPERATURES

Some trees and shrubs can be injured when temperatures fall below a minimum tolerance level. Plants most likely to suffer winter injury are those that are marginally hardy for the area or those already weakened by previous stress. In general, low temperatures are much less damaging than the aforementioned fluctuations in temperature.

WINTERBURN ON EVERGREENS

A browning or scorched leaf tip on evergreen foliage in late winter and early spring is a form of winter injury. Browning usually occurs from the needle tips downward. Symptoms of winter burn are present on many narrow-leaved evergreens, such as hemlock, juniper, pine, and yew, and broad-leaved evergreens, such as boxwood and rhododendron. Winter burn is usually attributed to a loss of water through leaf transpiration. Winter sun and winds dry needles. Water in the stems and roots is frozen and unavailable to replenish the loss. A rapid drop in temperature after a warm sunny day can also cause further injury to the plant..

SPRING FREEZES

Once spring growth has begun, a late spring frost can cause damage to de-acclimated woody stems, blossoms, and new shoots. Frozen, succulent, new tissue turns flaccid, appears water soaked, and withers within a short time. Freeze injury appears suddenly after a hard frost.

ROOT DAMAGE

Root tissues apparently do not acclimate to temperatures much below freezing and can be killed or severely injured by soil temperature below 15oF. This is especially true for shallow rooted plants. Fortunately, the presence of mulch, leaf litter, or snow cover insulates most soils sufficiently to prevent soil temperatures from falling much below freezing. Plants with frozen roots may wilt and decline after growth resumes in the spring.

We at Nogas want to ensure the health of your landscape by identifying any injury so that it can be remedied as soon as possible. The spring walkthroughs are the most efficient way of performing these services and lessening the chance of permanent or irreparable damage.

Sincerely,

Nogas Landscaping