

# HOME GROUNDS FACT SHEET

CORNELL Cooperative Extension  
Nassau County



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## Winterizing Your Garden

by Carl Totemeier

The severity of recent winters has caused us to seriously consider the need for winter protection in our gardens. While the vagaries of Mother Nature are beyond our control, there are things we can do to minimize plant damage when she deals us a bad hand from her deck of weather cards. Our first consideration is the hardiness of our plants. We have enjoyed some exceptionally mild winters. This has tempted us to fill our gardens with borderline hardy exotics...plants that suffer severe damage when the temperature drops suddenly or remains very cold for extended periods.

If you are a plant collector and enjoy experimenting with tender plants, continue to do so, but with the understanding that you will occasionally suffer severe losses. If you want a trouble-free garden, read the plant hardiness lists and stick with those plants that have proven themselves to be reliably hardy over a long period of time in our climatic zone.

We have become a generation of gardeners addicted to container plants. Geraniums, begonias, trees and shrubs in containers add much to our patios, decks, malls and plazas. While most deciduous trees suitable for planting in our area will survive in exposed containers during the winter, most broadleaf evergreens will suffer damage. The hardy coniferous evergreens such as pines and spruces may also suffer from windburn or dessication.

It seems that the roots and tops of most plants, especially broadleaf evergreens, are unable to withstand cold temperatures. Plants such as *Ilex* have a temperature differential as great as 20°F. In other words, their tops can withstand temperatures 20° colder than their roots. While plants may survive at 0°F when planted in the ground, their roots will be damaged or killed when planted in above ground containers. Such plants must be over-wintered in a protected coldframe or unheated building where the temperatures will not

become as cold. If small enough to be easily handled, they can also be plunged into holes dug in the ground in a well drained location and mulched. The needle-bearing evergreens, though supposedly hardier, will be less apt to burn if placed out of the winter sun and wind.

A major cause of winter damage with evergreens planted in the ground is dessication. Their leaves will lose water through transpiration whenever they're not frozen. If the soil is dry or frozen, the roots are unable to replace the lost water and the leaves will "burn." Exposure to sun and strong winds further aggravates the problem.

One way to prevent this damage is to water the soil thoroughly before it freezes to ensure an adequate moisture supply. Should a mid-winter thaw give evidence of dry soil, water even though it is mid-January or February.

Winter mulches of leaves, straw or pine boughs around such plants as rhododendrons and azaleas will reduce the depth of freezing and allow the roots to utilize the available moisture. Don't apply the mulch too early, especially with young plants, or they may not mature properly and suffer stem damage.

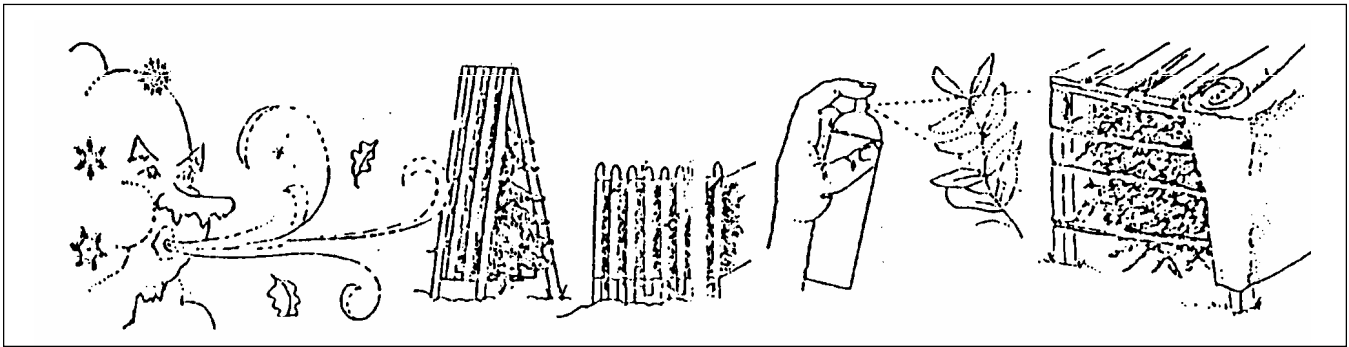
It used to be the rule of thumb that broadleaf evergreens were planted where they had protection from the winter sun and winds. This pattern is still practiced in colder climates. We have become careless as the result of past mild winters and have planted them with full exposure to obtain better flowering and a more compact habit. They would have sustained much less damage in recent cold winters if they had been planted on the east or northeast of a building or taller planting and where they had overhead shade such as that from a tall oak.

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If your evergreens are not planted in protected areas, the best thing to do is provide protection for them with shades and windscreens of burlap or snowfencing. It has been almost a tradition that this be done with boxwood. Perhaps we should consider extending this protection to other tender plants.

Anti-desiccants are another means of providing winter protection for evergreens. Materials such as Wilt-Pruf form a protective coating that reduces transpiration when sprayed on the foliage. They are applied in late fall or early winter when the temperature is above 40°F to provide sufficient time for them to dry. A second application should be made in mid-winter if there is a mid-winter warm spell. It is important to apply that second application. Plants can be more vulnerable if the weather is severe and it is not done.

Hybrid roses may benefit from winter protection in certain of the colder parts of L.I. The polystyrene cones used to cover them in colder climates are unnecessary here and may even be harmful. As spring approaches, the temperature may build up under the cone and result in premature growth and/or the development of damaging fungi. It is usually sufficient to mound a few shovelfuls of soil over the base of the canes to a depth of 8 to 12 inches. Some gardeners prefer to add a layer of salt hay once the soil has frozen to minimize temperature fluctuation, or use leaves or salt hay exclusively.

Herbaceous perennials and strawberries are more often damaged by frost heaving than from cold temperatures. A winter mulch applied after the soil is lightly frozen will stabilize the soil temperature and prevent heaving. Several inches of salt hay, straw or pine boughs will suffice.

Mention should be made of the importance of the general health of the plants. The hardiest rhododendron or yew may suffer winter damage if its roots

have been damaged by taxus weevil or other insects, by summer drought or from having been planted in a poorly drained location. Winter protection will be of little avail to such plants if the weather is severe.

If your plants are reliably hardy, in good health and well protected but still damaged, take consolation in knowing you have done all you could to help them. Consider such damage as one of the trials of gardening in a cold winter climate.