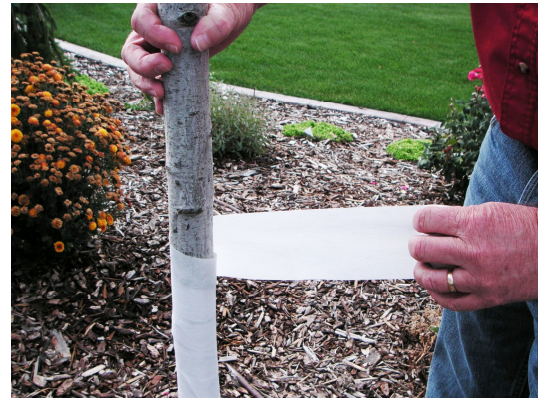


East Idaho winters can be long and cold for plants as well as people. While many plants require no special care to survive winter, others may need a little help to ensure that they burst back to life in the spring. Always choose plants that are adapted to this area in general, and to your unique location and microclimate in particular.

What You'll Need:	
Essential Items	Desirable Items
Lawn Winterizer	Rose Collars
Tree Wrap	Tree Food
Burlap	Pond Heater
Mulch	Pond Netting



Causes of Winter Damage and Winter Kill

Plants can be damaged by many factors including temperature, wind, snow cover (or lack thereof), sun, humidity, and cultural practices. Every plant has a lower temperature limit (determined by genetics) beyond which it will not survive. No matter how much care we give it, an orange tree is not going to survive outdoors in east Idaho! The USDA climate zones are useful in helping us identify which plants are most adapted to different areas of the country. Most plants rated at Zone 4 or lower will survive our winters in the valley locations of east Idaho. A few zone 5 plants do well in the warmer areas. Outlying areas at higher elevations may require Zone 3 or even Zone 2 plants. (See our flyer titled "Plants for Harsh Climates".) But some plants, even when rated hardy to the zone where we live, still need some protection. Here are some precautions you can take to ensure the survival of plants in your yard this winter.

Tender Plants Need Protection From:

Excessive Wind

Our seemingly ever-present winds can pose a great threat to our plants, especially during the winter. Evergreens are particularly sensitive because they keep their leaves (needles) all winter. Winds draw moisture out of the needles and if the ground is frozen or dry the plant cannot replace the lost moisture, resulting in brown foliage and "winter burn".

Remedies:

1. Tender plants should be planted in locations protected from our prevailing (southwest) winds. Areas on the north and east sides of buildings or protected by other large trees will provide significant protection.
2. Water thoroughly in the late fall, just as plants are losing their leaves. This assures that the plant will go into the winter well hydrated and that adequate moisture is available whenever the soil is not frozen.
3. Protect exposed plants with a windscreen or wrap with burlap. Never wrap with plastic or you could be doing more damage than good by causing excessive heat buildup during the day and rapid cooling after sundown.
4. Spray plants with an anti-desiccant such as Wilt-Pruf. This helps reduce the transpiration rate of the plant, avoiding excessive moisture loss. Spray according to directions in early to mid fall.

Excessive Sun or Heat - The heat of winter sun, especially if reflected off snow or reflective structures can also cause increased transpiration and moisture loss that cannot be replaced if the soil is frozen. Sun can also damage the trunks of young deciduous trees with thin bark. The leaves of deciduous trees drop to the ground in autumn exposing the trunk to the sun while at the same time the sun sets lower and lower in the southern sky, shining directly on the southern side of the trunk. On extremely cold days (which are often clear and sunny) the sun may raise the temperature of the bark on the south side of the trunk to as much as 60 or 70 degrees, while the north side remains well below freezing. Then after the sun sets, the temperature of the bark drops rapidly. These wildly fluctuating temperatures can result in "sun scald" or cracks in the trunk on the south side of the tree. So when we wrap the trunk of the tree we are not protecting it from the cold but from the heat!

Remedies:

1. See above. Many protective measures that you take will protect from both the wind and the sun.
2. Wrap the trunk with white tree wrap or tree guards. Do not use dark tree wrap as it will absorb the heat rather than reflect it. And be sure the wrap is ventilated to avoid heat buildup. Apply the wrap in October or November and remove in March or April. In general, older trees with thick corky bark do not require wrapping.
3. Painting latex whitewash on the trunks of trees can also protect them by reflecting the sun off of the trunk, thus avoiding heat buildup. An added benefit with fruit trees can be a slight delay in blossoming in the spring which can help you avoid damage from late frosts.

Alternate Thawing and Freezing - Some perennial flowers and groundcovers can be damaged by "frost heave" or alternate freezing and thawing of the ground, especially in late winter or early spring. This soil movement can sometimes damage the root hairs and occasionally even push the plant right out of the ground.

Remedies:

1. Avoid planting in excessively wet or boggy areas where the heaving action is most severe.
2. Mulch the soil and plants with several inches of Soil Pep or leaves in the late fall to maintain an even soil temperature. This should be done in the late fall after there is some frost in the ground.

Damage from Ice and Snow - In most cases snow is a plant's best friend in the winter. Early, deep snowfalls can keep the ground from freezing all winter long, allowing the plant to continue to replenish lost moisture. Snow cover also protects evergreen foliage from the effects of winter wind and sun. But unusually heavy snowfalls, or ice falling from the roof of a house can physically damage plants by breaking limbs and branches.

Remedies:

1. Avoid pushing heavy snow onto shrubs with brittle branches.
2. Upright evergreens such as Arborvitae that may be subject to snow or ice sliding off the roof can be wrapped in the fall with bird netting or burlap to prevent the snow from breaking down the branches.
3. Avoid using salt to melt the ice on sidewalks that are close to sensitive shrubs. Use an ice melter designed to minimize damage both to your sidewalk and your plants, and use only as much as you really need.

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Things you can do to prepare your yard for winter:

What	When	How
Nearly all plants	Fall	Encourage dormancy by avoiding fertilizing in August and watering less in early fall (September), but soak them up well when the leaves begin to fall in October. Mulch with several inches of Soil Pep or leaves to maintain even soil moisture and temperature.
Roses	November	Prune to 18". Mulch 6 to 12 inches deep with Soil Pep, soil, or leaves. Rose collars are helpful. If cones are used be sure they are well ventilated. Don't feed after late July.
Broadleaf Evergreens, Alberta Spruce, and Arborvitae	October or November	Spray with Wilt-Pruf if newly planted. Wrap with burlap. Feed with Save-A-Tree or T&C Tree & Shrub Food.
Upright Evergreens	October or November	Wrap with bird netting or burlap to prevent limb breakage from heavy snow. Feed with Save- A-Tree or T&C Tree & Shrub Food.
Shade, Flowering, and Fruit Trees Especially young cherries, green ash, mountain ash, and maple	September to November	Wrap trunk up to first branches with white tree wrap. Use tree guards on younger trees. Option: paint trunks with latex white wash. Feed with Save-A Tree or T&C Tree & Shrub Food.
Raspberries	October or November	Prune back to 4 to 5 feet. Tie up to prevent snow damage. Apply Casoron to prevent weeds. Apply granular sulfur and manure to acidify and add nutrients to the soil.
Strawberries	November	Mulch with straw.
Vegetable Gardens	October or November	Apply sulfur, manure and Natural Guard Soil Activator, then spade or roto-til under spent plants.
Perennials	Fall	Divide as needed in September or October and mulch well. Mulch established plants after the ground starts to freeze.
Lawns	September and October	Fertilize with Fertilome Weed Out + Lawn Food in early September. Then apply T&C Winterizer in mid October. Mow your lawn as short as possible the last mowing of the season and bag or rake the clippings.
Ponds	Before leaves begin to fall Before water freezes over	Stretch pond netting over pond to keep debris out. Remove pump and store indoors. Install pond heater to keep a hole thawed to keep fish healthy. Move plants to a deep part of the pond. (18-36")