



ORGANICALLY GREEN

HORTICULTURAL SERVICES

Winter Newsletter, 2015

Winter Injury

It is no secret that the winter is a harsh season, what we sometimes don't realize or remember is that it can be especially hard on our plants. There are several ways that plants can show winter damage.



One of the most common types of winter damage is breakage. This occurs when heavy snow or ice accumulates on the branches or stems of a tree/shrub and causes them to crack or break off.

Trees with weak limbs or multi-stemmed plants such as arborvitaes are especially susceptible to this type of damage. To help alleviate breakage, before the winter you can tie up susceptible trees/shrubs or while you are digging out your car



you can take a broom and gently knock the snow from the branches. However, if the branches are deeply buried trying to free them may cause more damage. It may be better to wait for some natural melting to occur.

Another type of winter damage is due to the de-icing salts we use for our hardscapes. There are two ways salt damage can occur, the first is through



absorption. The sodium and chloride ions separate and are easily absorbed into roots where they travel to leaf tissues and can cause a burn or browning. They can also affect plant growth by decreasing the uptake of potassium, calcium and magnesium; necessary nutrients for plant functions. Excess salt can also have an effect on soils by causing the breakdown of aggregates and if present in high levels, can actually cause water to move out of plants. Salt damage is more likely to occur if the salt is applied after plants have broken dormancy. To try to avoid damage from salt use sand, calcium/magnesium chloride as well as making sure to remove all snow from walkways before putting the de-icer down.

The second way plants can have salt damage is through passing cars and plows spraying it onto



foliage. The salt then can enter plant cells or spaces between cells and once it accumulates in toxic levels it can cause death/damage to twigs and buds. On conifers (cone bearing plants) it can also cause yellowing/ browning of needles and/or dieback. Salt is also especially damaging to plants with thin bark such as beech. If plants are in danger of this type of damage, it may be worthwhile to have a burlap screen or fence erected to try to ward off salt spray.

Desiccation, another type of winter damage which also causes browning of leaf tissues is caused by something entirely different. Evergreens, especially broadleaf evergreens such as holly and rhododendron are very prone to this type of injury. During a sunny and/or windy day, especially in the late winter or early spring, plants can lose water through their leaves (transpiration) which they cannot replace due to the unavailability of water in the frozen soil.



However, winter injury is not limited to tender leaf and stem tissues but can also cause damage to the bark of trees in such forms as sunscald and frost cracks.

Sunscald is most common on the south and southwest side of young trees and trees with thin bark, for example beech, willow and white pine. On a sunny winter day, the trunk tissue begins to heat up, which triggers the trunk to think it's spring and they lose their cold-hardiness. When the temperature begins to drop rapidly after sunset the living cells just inside the outer bark are damaged or killed.

This causes sunscald injury which can appear as cracks, sunken areas, cankers or discoloration on the bark; stressing the tree and providing an entrance for insects and pathogens. The only way to combat this type of injury is to wrap the trunks in late fall with a light colored material to reflect the light.

The next type of winter bark injury, frost cracks occurs similarly to sunscald. The winter sun warms the bark- usually on the south and west side of the tree- and is followed by cold temperatures, which causes water to move out of cells and freeze causing the wood to shrink. The shrinkage produces tension/pressure between the frozen and unfrozen layers of wood and triggers a crack.

However, once temperatures warm, the cells absorb moisture and expand effectively closing the crack. Again certain trees are more susceptible to this type of injury such as London planetree beech and apple. Prevention of this



injury is again similar to sunscald in that you must wrap the tree trunk with a light colored material.



The final type of winter damage we will discuss is frost heaving which occurs from freezing and thawing of surface soil. This repeated expansion and contraction causes some plants to be lifted out of the soil, possibly breaking roots in the process as well as drying them due to exposure from cold and wind. Plants that are most susceptible are those that are shallowly rooted or newly planted shrubs or perennials as they haven't had a chance to establish a root system. In order to help prevent frost heaving mulching is recommended to help reduce frequent freezing and thawing. Also if you notice a plant has heaved it is important to get it back in the ground as soon as possible.



Preparing your landscape and being aware of winter's potentially damaging forces can help keep your plants and gardens looking good for the seasons ahead!

FUN Fact:

Some plants such as apples, tulips and hyacinths require "vernalization" (from Latin *vernus*, meaning "of the spring") to flower. This means that a plant needs to experience a period of low winter temperature to initiate or increase the flowering process.



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Wishing you the joy of family, the gift of friends, and the best of everything for the new year!

-The Organically Green Team

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"Laughter is the sun that drives winter from the human face."

— Victor Hugo

Organically Grown

Mushroom Black Bean Vegetarian Chili



Ingredients:

- 2 tablespoons extra virgin olive oil
- 2 medium onions, diced
- 2 sweet red bell peppers (or 1 red and 1 green), diced
- 1 tablespoon organic Chili Powder
- 2 teaspoons organic Garlic Powder
- 1/4 teaspoon organic cayenne
- 1 1/2 pounds portobello or crimini mushrooms, cut into 1/2 inch pieces
- 1 (28-ounce) can Italian-style diced tomatoes (recommended brand: Muir Glen)
- 1 (19-ounce) can black turtle beans, drained and rinsed
- Frontier Sea Salt and organic black pepper, to taste
- 1 pound chopped tempeh or ground turkey, optional

Directions:

1. Heat the oil in a large pot over medium heat, and cook the onions and peppers until tender. Stir in the garlic powder, chili powder and cayenne pepper. Sauté until tender, then add the mushrooms and continue cooking, stirring frequently, 10 minutes, or until the mushrooms are tender.

2. Pour the tomatoes and beans into the pot. Season with salt and pepper. Bring to a simmer, then reduce heat to low, and simmer 40 minutes, stirring every 10 minutes or so. If you prefer a runnier chili, simmer covered. For thicker chili, leave uncovered.

If you choose to add chopped tempeh or ground turkey, use about 1 pound, and brown in the olive oil before the onions and peppers. A little extra oil may be needed.

For garnish:

Choose from shredded cheese, chopped onion, chopped jalapeno, chopped avocado, sour cream and cilantro sprigs.

Note: We recommend using certified organic ingredients, when available, in all recipes to maximize flavors and nutrition while minimizing your risk of exposure to pesticides, chemicals and preservatives.

Plants for the Winter!

December:

Christmas
Rose
(*Helleborus
niger*)



- ❖ Perennial; 6"-12" height; forms clump of leathery evergreen leaves
- ❖ Large cup shaped flowers; white to soft pink; flowers December-April
- ❖ Prefers well-drained soil and part-full shade
- ❖ Many variations in size, color and bloom time
- ❖ Liabilities: low tolerance for dividing or being transplanted once established

January:

River Birch
(*Betula nigra*)



- ❖ Deciduous, 50'-70'+ in height; mature form is rounded/irregular
- ❖ Can be multi-stemmed; edium-fast growth rate
- ❖ Prefers full sun and moist soils (Found along stream/river banks)
- ❖ On young trees bark is red-brown and exfoliating; mature trees lose this quality
- ❖ Some yellow fall color
- ❖ Good for shade or naturalistic plantings; effective in groupings
- ❖ Liabilities: Chlorosis in high pH soils

February:

Blue Atlas Cedar
(*Cedrus atlantica*
'Glauca')



- ❖ Large conifer tree with glaucous blue needles; pyramidal when young developing to flat-topped with horizontal branches; 40'-60'
- ❖ Prefers full sun -part shade; needs well-drained deep soil.
- ❖ Weeping & fastigate forms also very popular but all need adequate space to develop
- ❖ Useful as a specimen or urban parks
- ❖ Needs protection from sweeping winds

Services for 2015:

We offer the following services to help increase the enjoyment and beauty of your property:

Tree / Shrub:

- ❖ Shrub & Tree Spraying / Fertilization Programs
- ❖ Integrated Pest Management
- ❖ Soil Restoration
- ❖ Plant and Soil Stimulation Program
- ❖ Deep Root Feeding
- ❖ Root Growth Enhancement
- ❖ Mature Tree Restoration
- ❖ Air Spading
- ❖ Radial Trenching
- ❖ Vertical Mulching
- ❖ Anti-Desiccant Spraying
- ❖ General Tree and Shrub Maintenance

Removal Turf:

- ❖ Lawn Renovation
- ❖ Fertilization
- ❖ Overseeding
- ❖ Core Aeration
- ❖ Estate / Property Purification



Organic Pest Control:

- ❖ Flying Insect
- ❖ Deer / Geese
- ❖ Rodent Repellent
- ❖ Organic Tick & Flea Control

*We also offer Outdoor Holiday Décor.
Call (631) 467-7999 for a free estimate!*