

Extreme low winter temperature is a major factor when choosing landscape plants. If you choose plants that aren't cold hardy enough for your location they will not perform as expected, can become injured from cold, and can die as a result of the extreme cold temperatures. To help farmers and gardeners make decisions about what to plant in their areas, the USDA has established hardiness zones that are mapped on the USDA Hardiness Zone Map (See the website Planthardiness.ars.usda.gov for an interactive map to determine what zone your garden is in).

The hardiness zones are determined by the average minimum winter temperatures in an area. There are 13 zones in 10 degree increments which are further divided into 5 degree increments noted by an "a" or "b" within each zone. New York hardiness zones range from 7b in Long Island with minimum temps from 5 to  $10^{\circ}$  to 3b in the elevations of the Adirondack Mountains with minimum temperatures -35 to -30°. The lower the number of the zone the colder the minimum winter temperatures are.

On most labels for perennials and nursery stock, the coldest hardiness zone that a plant can survive in is listed. If you are planting in a zone with a higher number, you are planting into a warmer zone so the plant shouldn't be negatively affected by the area's lowest minimum temperatures. For example, if the label of a perennial plant says it will survive in Zone 3, then you are safe to plant in Zone 3 and higher, such as Zone 5. If you suspect that you live in an area that tends to be colder than surrounding areas, play it safe and choose plants that will survive in a zone colder. This is a guide intended to help you determine what plants will thrive in your garden.

## Hardiness Zones of local towns and cities

- Syracuse, Baldwinsville, Camillus, Onondaga, Fayetteville, Bridgeport Zone 5b (-15° to -10°F)
- Cortland, Pompey, Cazenovia, Central Square, Zone 5a (-20° to -15°F)
- Oswego Zone 5b (-15° to -10°F) to 6a (-10° to -5°F) depending upon proximity to Lake Ontario
- Watertown Zone 4b (-25° to -20°F)
- Rochester Zone 6a (-10° to -5°F) to 6b (-5° to 0°F)
- Utica 4b (-25° to -20°F) to 5a (-20° to -15°F)
- Old Forge Zone 3b (-35° to -30°F)

## Cold damage

- Branches die back, sometimes looking black such as on roses. Evergreens may turn brown in spring.
- Deciduous plants may not break dormancy or break dormancy very late. Perennials may not start growing from the crown or are much smaller than the previous year.
- Flower buds may freeze, reducing flowers and fruit production the following growing season.

## Factors that may affect your Hardiness Zone relative to surrounding areas in CNY

- Higher elevations, such as the Adirondacks and hills south of Syracuse, have lower minimum winter temperatures
- Windchills from extreme winter winds don't affect minimum winter temperatures. Plants are generally at the ambient temperature so wind passing over them doesn't decrease temperature by removing heat as it would with, for example, the skin of a person. In fact, wind can help increase minimum temps by mixing colder air that has settled in low spots such as in a valley.
- Closer proximity to larger lakes such as Lake Ontario, Oneida Lake, and the Finger Lakes will increase minimum winter temps making those areas warmer
- There are areas north of Syracuse where zones change from warmer by Lake Ontario (Zone 6a) to much colder in the Tug Hill Plateau (3b) within 40 miles. It's important to understand and know your hardiness zone before you plant into these areas.

## **Cold Zone Plants**

**Please note:** This list does not imply availability of items listed at any given time. For many Genera and species of plants, the cold hardiness will vary for specific cultivars and hybrids. Make sure to check cold hardiness for specific cultivars and hybrids. This list contains plants for certain zones as a guide. We cannot guarantee hardiness since we have no control of climate or conditions into which the plant will be installed. In addition, when researching plants for hardiness, often zones listed for a specific plant vary depending upon the resource. Again, this is a guide to help customers make decisions.

## Zone 2 Plants Botanical Name

Betula pendula 'Youngii' Caragana arbor. 'Pendula' Cornus sericea All varieties Microbiota decussata Picea abies **Picea** pungens Pinus mugo pumilio Phlox subulata All Varieties Physocarpus Amber Jubilee Potentilla frut. All varieties Rosa rugosa Rosa rugosa alba Salix candida Iceberg Alley Salix discolor Syringa x hyac. Some Varieties

#### Zone 3 Trees Botanical Name

Abies balsamea Abies concolor Acer rubr. 'Autumn Flame' Acer sacc. 'Green Mountain' Amelanchier canadensis Amelanchier 'Princess Diana' Ginkgo bilo. 'Autumn Gold' Malus Golden Raindrops Malus Showtime Pinus strobus Quercus rubra Sambucus canadensis Salix alba 'Tristis' Syringa reticulata 'Ivory silk'

#### Common Name

'Youngii' Weeping Birch Weeping Pea Red Twig Dogwood Russian Cypress Norway Spruce Colorado Blue Spruce Dwarf Mugo Pine Creeping Phlox All Varieties Ninebark Amber Jubilee Potentilla All Varieties Rugosa Rose White Rugosa Rose Iceberg Ally Sageleaf Willow Pussy Willow Lilac hybrids Some Varieties

## Common Name

Balsam Fir Concolor Fir 'Autumn Flame' Red Maple 'Green Mountain' Sugar Maple Shadblow Serviceberry 'Princess Diana' Serviceberry 'Autumn Gold' Ginkgo Golden Raindrops Crabapple Showtime Crabapple White Pine Northern Red Oak Elberberry 'Adams', 'York' Niobe Golden Weeping Willow 'Ivory Silk' Japanese Lilac Tree Zone 3 Shrubs Botanical Name Aronia mela. all varieties Cornus alba All varieties Hydrangea arborescens

Hydrangea pani. All Varieties Juniperus chinensis Most Varieties Juniperus horizontalis All Varieties Juniper scop. All Varieties

Physocarpus All Varieties Picea abies Grafted Varieties Picea pung. Grafted Varieties Pinus strob Grafted Varieties Prunus cistena Rhus aromatica 'Gro-Low' Spiraea japonica All varieties

Spiraea x vanhoutei 'Renaissance' Syringa x Bloomerang Syringa meyerii 'Palibin' Syringa patula 'Miss Kim' Syringa vulgaris All Varieties Thuja occi. Most Varieties

# Zone 3 Roses

Above & Beyond (Climbing) Campfire (Shrub) Lotty's Love (Rugosa) Blanc de Coubert (Rugosa) Hansa (Rugosa)

## **Common Name** Black Chokeberry Ivory Halo Redtwig Dogwood Smooth Hydrangea All Varieties Panicle Hydrangea All Varieties Chinese Juniper Most Varieties **Creeping Juniper All Varieties Rocky Mountain Upright** Juniper Ninebark All Varieties Norway Spruce Varieties **Blue Spruce Grafted Varieties** White Pine Grafted Varieties Sandcherry

'Gro-Low' Fragrant Sumac

Dbl Play Little Princess Magic Carpet

Neon Flash Shirobana Van Houte Spiraea

Bloomerang Lilac All Varieties 'Palibin' Dwarf Lilac 'Miss Kim' Dwarf Lilac French Hybrid Lilacs Eastern White Cedar

# Zone 3 Grasses

# Zone 3 Perennials

#### **Botanical Name**

Andropogon gerardi Schizachyrium scoparium

## Zone 3 Perennials Botanical Name

Achillea mill, Most Varieties Alchemilla mollis Aralia cordata 'Sun King' Artemesia schmidtiana 'Nana' Asclepias tuberosa Aster divaricatus All Varieties Aster nova. All Varieties Aster nova. All Varieties Bergenia All Varieties Brunnera All Varieties Campanula carp. All Varieties Chelone All Varieties Coreopsis verticillata

Delphinium All Varieties Dianthus Some Varieties Dicentra spec. All Varieties Echinacea purp. All Varieties

Eupatorium macu. All Varieties Gaillardia All Varieties Hemerocallis All Vaieties Hosta All Varieties Iris siberica All Varieties Liatris spicata All Varieties Lobelia cardinalis Matteuccia struthiopteris Monarda Many Varieties Nepeta x fraassenii All Varieties Paeonia All Varieties Penstemon Hybrids

Phlox pan. Most varieties Polemonium All Varieties Pulmonaria All Varieties Rudbeckia fulgida 'Goldsturm'

## Common Name

Big Blue Stem Little Blue Stem

## Common Name

Yarrow Most Varieties Lady's Mantle Golden Japanese Spikenard Silvermound Butterfly Flower Wood's Aster New York Aster All Varieties Japanese Painted Fern Pigsqueak All Varieties Siberian Bugloss All Varieties Bellflower Turtlehead All Varieties Threadleaf Coreopsis Moonbeam Zagreb

Larkspur **Pinks Some Varieties Bleeding Heart All Varieties Coneflower All Varieties** PowWow Wild Berry, White Joe-Pye Weed All Varieties Blanketflower All Varieties **Daylilies All Varieties** Plantain Lilv Siberian Iris All Varieties **Blazing Star Cardinal Flower Ostrich Fern** Bee Balm Many Varieties **Catmint All Varieties Peonv All Varieties** Beardtongue 'Dark Towers' 'Husker Red' Tall Garden Phlox Jacob's Ladder All Varieties Lungwort All Varieties 'Goldsturm' Black-eyed Susan

Salvia nemorosa All Varieties

**Botanical Name** Sedum spectabile

Sedum Hybrids Most Varieties

Sempervivum All Varieties

## Zone 4 Trees Botanical Name

Acer griseum Acer palmatum 'Cider Hill' Acer platanoides 'Crimson King' Acer rubrum 'October Glory' Acer rubrum 'Red Sunset' Amelenchier 'Autumn Brilliance' Betula nigra Dura-Heat Cornus mas 'Golden Glory'

Cornus kousa Galilean Gleditsia triacanthos Malus 'Coralburst' Malus 'Prairie Fire' Malus 'Robinson' Malus 'Royal Raindrops' Picea omorika Prunus Mt. St. Helens Quercus bicolor

## Zone 4 Shrubs Botanical Name

Buxus Chicagoland Green Buxus Green Velvet Chamaecyparis pisi. 'Golden Mops' Cletha alnifolia All varieties Diervilla sess. Cool Splash Euonymus alatus 'Compactus' Forsythia 'Lynwood Gold'

Hydrangea mac. Endless Summer

#### Perennial Salvia All Varieties

**Common Name** 

Sedum Many Upright Varieties Sedum Hybrid Varieties Rock 'N Grow Rock 'N Low Rock 'N Round Hens & Chicks

#### Common Name

Paperbark Maple 'Cider Hill' Japanese Maple 'Crimson King' Norway Maple 'October Glory' Red Maple 'Red Sunset' Red Maple 'Autumn Brilliance' Serviceberry **Dura-Heat River Birch** 'Golden Glory' **Cornelian Cherry** Galilean Kousa Dogwood Thornless Honeylocust 'Coralburst' Crabapple 'Prairie Fire' Crabapple 'Robinson' Crabapple 'Royal Raindrops' Crabapple Serbian Spruce Mt. St. Helen's Purple Plum Swamp White Oak

#### Common Name

Chicagoland Green Boxwood Green Velvet Boxwood 'Golden Mops' Cypress

- Summersweet
- Dwf Bush Honeysuckle Dwarf Burning Bush 'Lynwood Gold' Forsythia

Hydrangea Endless Summer Bloomstruck Summer Crush The Original Juniperus procumbens 'Nana' Juniperus squamata 'Blue Star' Ilex glabra All varieties

#### Zone 4 Shrubs Botanical Name

Ilex verticillata All varieties Magnolia loeb. 'Leonard Messel' Magnolia x lili. Hybrids Philadelphus All varieties Rhododendron Aglo Rhododendron Midnight Ruby

Rhododendron PJM Rhododendron Purple Gem Sambucus nigra

Taxus media All varieties

Weigela florida All varieties

## Zone 4 Vines Botanical Name

Wisteria macr. Summer Cascade Parthenocissus quin. Red Wall Parthenocissus tricuspidata

# Zone 4 Roses

Easy Elegance (Shrub) Champagne Wishes Como Park Coral Cove Kashmir Music Box Paint the Town Drift Roses (Shrub) Miracle on the Hudson (Shrub) Dwarf Garden Juniper 'Blue Star' Juniper Inkberry All Varieties

#### Common Name

Winterberry All Varieties 'Leonard Messell' Magnolia Little Girl Series Magnolias Mockorange All Varieties Aglo Rhododendron Midnight Ruby Rhododendron PJM Rhododendron Purple Gem Rhododendron Black Elderberry Black Lace Instant Karma Yews Densiformis Majestic Weigela Spilled Wine Very Fine Wine Wine & Roses

#### Common Name

Summer Cascade Wisteria Red Wall Virginia Creeper Boston Ivy

# **Zone 4 Perennials**

**Botanical Name** Allium Perennial hybrids

Astilbe x arendsii Hydrids All Astilbe chinensis All Varieties Astilbe japonica All Varieties Athyrium fili. All Varieties Baptisia All Varieties Coreopsis grandiflora

#### **Dianthus Many Varieties**

#### Echinacea Hybrids Most Varieties Heliopsis helia. All Varieties Heuchera species & Hybrids All Hibiscus mosc. Summerific Series Lavandula x inter. Phenomenal Lupinus Perovskia atrip. All Varieties Rudbeckia x 'Little Gold Star'

Sedum Sunsparkler Series Veronica spicata All Varieties

# Zone 4 Grasses

**Botanical Name** Carex pensylvanica Calamagrostis acuti. All Varieties

Festuca glauca

Juncus effusus 'Big Twister' Panicum virgatum All Varieties

## Common Name Allium Perennial Medusa Millenium Serendipity Arendsii Hydrid Astilbies All Astilbe Chinese All Varieties Astilbe Japanese All Varieties Lady Fern All Varieties False Indigo All Varieties Tickseed Moonbeam

Zagreb

Pinks Many Varieties Paint The Town Series Fruit Punch Series Hybrid Coneflowers

False Sunflower All Varieties Coral Bells Perennial Hibiscus

Lavender Phenomenal Lupine All Varieties Russian Sage All Varieties 'Little Gold Star' Black-eyed Susan Sunsparkler Series Sedum Speedwell All Varieties

## Common Name

Pennsylvania Sedge Feather Reed Grass

Blue Fescue Beyond Blue Elijah Blue Corkscrew Rush Switch Grass All Varieties