

Gardening Guide

1. Open the box right away. Your plants will appreciate the fresh air.

2. Water any droopy or dry plants. Wilting is a plant's natural defense against drying out. It's normal—just give them a good drink and they'll perk back up in several hours. You can water your plants right in their shipping carrier if you wish. If the plants are bone dry, remove from the packing carrier and place the plants in a shallow pan of water overnight. That way they can soak up a good long drink of water and will perk up by morning.

3. Set your plants outdoors in a semi-shady area until you're ready to plant.

4. Your plants will appreciate a couple of days in some dappled shade to recover from the rigors of shipping. They have not seen any sunlight for several days and this "time out" will let them reacclimatize. *Note:* We may have trimmed back some of the plants. We do this to promote full, bushy growth, and to minimize any damage in transit. They'll quickly put forth new growth and flourish. Any bent plant foliage will straighten out on its own, but it's fine to trim off any broken foliage.

5. If you wish to hold your plants longer than a few days before planting: Not to worry, move them to some dappled sunlight and water well when you see wilting—normally 2 to 3 times a week. Do plant them as soon as you can because they'll appreciate being in the ground (the sooner they get growing the bigger they will get). A light feeding can help your plants if they are still not in the ground in two weeks. If it's forecast to go below 32 degrees Fahrenheit you'll want to keep them in your garage or porch overnight. All varieties except Mums can take a hard frost. Get the plants back outside the next day as they will be happiest outdoors. Too cold/Too hot to plant? Keep your plants shielded from extremes in temperature for a few days, but in general, your plants are more okay with hot and cold temps than you might think and they need to be outside as much as possible.

Ground Preparation

A little time spent in soil preparation will be well rewarded. Your plants will appreciate your efforts and reward you with healthy growth and lots of flowers.

You will want to first remove any weeds, debris, leaves, etc. from your site. If there is lawn where you want to plant, you will want to take a shovel and "skim" off the top 2" or so of grass (great

for using to fill dips, potholes, or to raise low spots elsewhere in your lawn). If the soil is hard to dig with a hand trowel it will benefit from being loosened up. (It will also make planting much easier, too!) Roots need to be able to breathe. A rock hard soil (compacted) is a sure indication that there will be very little space for air (porosity) between the grains of dirt.

Take a shovel or garden fork and dig a deep shovelful and flip it over in the hole you just made. Repeat about 6" away—working your way across your planting area. If the flip doesn't break up and loosen your soil, you may need to chop a few times with your shovel / fork to help it break up.

This is a great time to incorporate soil amendments. Just spread any needed amendments on the surface before the "flip". Compost is always good! You can purchase it in bags or make your own for the next year. Work it in so that the result is 'mostly' existing soil but you can still see the compost in the soil.

Planting Instructions

1. Water the plants well the night before planting.

Cut off the plastic wrap (if present) at the top of the pot. *Note:* The wrap and all of our packaging can be recycled.

2. You may find it helpful to first set out your plants where you think you'll be planting them. Plant spacings are printed on the individual plant tags. A 2' plant spacing means the plant will mature to make a 2' circle. (Or, 12" in all directions from the stem of each plant.) Step back; take a look, and rearrange as necessary. When all looks pleasing, begin to dig holes and plant (our version of the "measure twice—cut once").

3. Plant your plant—pot and all. The roots will grow right through the 100% biodegradable pot and into the surrounding soil. Place the top of the pot a little below the soil line. (See Clematis Care for planting Clematis.) Build a ring of ridged soil 6" from the plant—it will help you water-in thoroughly. Next, water deeply to 'settle' the plant and remove any air pockets around the roots. If in doubt, dig a 6" deep 'extra' test hole near the plant and see if the watering has soaked deeper than the pot. If not, water again.

4. Going forward, water when you see wilt and the soil is dry to your touch. Constant shallow watering will make your plant dependent on you. Well-timed deep watering will promote a self sufficient garden and healthier plants!

Growing Guide

Watering & Summer Care

Be mindful in the summer (particularly the first year) that your plants are being watered to their best advantage. Rainfall of 1" or more a week is sufficient and your plants may not need to be watered. If supplemental watering is needed, be sure to water deeply around and away from the center of the plant. You want the plant's roots to be "reaching out" of the pot to find water.

New gardeners are often surprised to find that what they considered a good soaking is only wetting the soil to a depth of an inch or so. Watering deeply encourages roots to extend deeper where they are protected from the fluctuating surface temperatures. Shallow-rooted perennials experience stress, dry out quickly and must be watered more often. Plants can wilt on sudden hot days after wet spells because they grew more foliage than their roots can support. When allowed to dry out, they'll realize this and will push more root growth to get back in "balance". This growth pattern greatly helps with overwintering.

Follow these simple tricks to determine how much to water your garden:

- Dig down 6" thirty minutes after watering to see how deep the water has penetrated. A good 6" of wet soil is ideal.
- Place a few cans throughout your garden when watering to check the amount applied, especially if you are running an automatic sprinkler. If you are watering sufficiently and evenly, each can should have approximately 1" of water in it afterwards.

To keep weeds down, lightly scratch the soil as weeds are starting to show. This will destroy the few weeds that are visible as well as the ones just starting to break out of their seeds below. To germinate, seeds must be in the top of the soil layer, be in contact with the soil, have ample moisture, and almost all have to be in the light. That's why once your new plants are up to size, the weed problem becomes minimal. As the plants mature and shade most of the ground, exposure to sun is minimal and scratching the soil to minimize weeds can be more vigorous (if you desire) and the watering needs will be less frequent.

If you notice any perennials growing a single foliage stalk straight up, the stalk can (and should) be cut back by removing the top 1" of growth to promote branching and more flowers.

Fall & Winter Care

It's common practice to cut the entire perennial bed down to about 6" in late fall to remove any old debris that will be in the way next season. This is also a good time to pull out any dead annuals in your border so there is no question in the spring whether a dead looking clump is *really* dead or is actually a valuable perennial, not yet awake. Most perennials will show signs of life at their center early in the spring, and with any annuals pulled the fall before, spring cleanup can be delayed quite a while. No plants need to be lost to an overzealous

worker! A light application of fertilizer or a thin layer of compost can be added anytime from late fall to early summer on established beds to maintain the health of the bed.

Feeding

There are several ways to feed your plants. Top-dress with compost annually – as the compost decays it will feed and amend the soil. Rain will cause the nutrients to seep into the soil as well. An inch of well-aged compost is sufficient. Aged compost can be purchased in bags, in bulk, or made from yard waste. Well-aged manure can also be used as a top-dress or worked into the top inch or two. Making a 'tea' from compost or manure and using it for watering is also good.

Organic or commercial fertilizer products: There are many good products on the market. You'll usually have two kinds to choose from: water soluble or solid feed. Water soluble is applied with a hose end feeder while watering, and solid feed looks like bird seed and applied on top of the ground.

We recommend solid feeding (Osmocote is a good brand). It offers a balanced, time-released feeding and is easy to apply. This will slowly feed your plants every time it rains or you water and is typically good for 3 months. If you chose an organic solid fertilizer (i.e. Plant-tone) it will typically need to be applied more often.

Water soluble products (i.e. Miracle-Gro) are good for a quick pick-me-up feeding when used in conjunction with solid feed. If your plants are starting to look dull or begin to yellow then is usually a sign that they are getting hungry. Whatever product you use be sure follow the directions. With fertilizer please remember that more is not better. Plants prefer slow and steady.

On established beds we like to feed in the spring about the same time you see dandelions beginning to flower. In colder zones, don't feed from late summer on as forcing fresh growth is not advisable as your beds head toward winter. For shrubbery, early spring is the best time to feed. There are fertilizers especially formulated for shrubs.

Mulching

For Decorative/Weed Suppression

Applying mulch for these reasons is a personal choice. The Pros: It will keep the root zone cooler and helps retain soil moisture. Mulch also looks nice and helps control weeds. The Cons: It can be expensive, won't stop grassy weeds, will tie up nitrogen (which plants need) as it decays, and can repel water if it totally dries out and hardens. We like to apply a shallow layer of mulch (1-2" deep) about six weeks after planting. This will allow you to cultivate the soil a few times before mulching thus killing all the weeds as they germinate.

For Winter Protection

We don't recommend mulching for winter protection except for extreme northern gardeners who don't have reliable snow cover (which provides great protection). The plants are very hardy and shouldn't normally require winter protection. Many more plants are lost to smothering and rotting than to temperature extremes. If you decide to mulch for winter protection, wait until the ground is frozen hard to apply it. Use excelsior, salt hay, evergreen boughs, straw—anything that won't mat down or smother works well (avoid using leaves and grass clippings) and avoid mulching heavily over the crown. The mulch will need to be removed with the first thaw. In Ohio, we typically have December, January and February thaws, so we don't bother mulching as it would do more harm than good.

Moving & Increasing Plants

As you gain experience with perennials, you may want to change the location of some of your plants. They can all be moved at almost any time by lifting them intact with a good clump of soil around the roots and setting them in their pre-dug new hole. When the plants are in growth, however, they should not be moved without their soil as they cannot establish new roots fast enough to keep up with the demands of their top growth. In early spring and in the fall, the plants can be relocated successfully without soil on the roots.

Plants are best dug and divided in the early spring or late fall. Dig the plant clump with as many roots as you can get. Use a sharp knife or a spade to divide the clump vertically so that each section has part of the center crown and some roots. Replant the sections in their new locations and water in well.

If a plant is divided and replanted with no wilting of the tops, they're fine. If they do wilt they should be watered again and provided some temporary shade until new roots can start growing in two or three days.

You can divide even after they've begun to grow in the spring, but the longer you wait, the more care they will need to re-establish themselves. Try this for a start: Slice a piece off the side of some plants just after the ground warms. Transplant these to new spots leaving the main part of the plant undisturbed.

Note: Some plants (like Dianthus) that have a central stem cannot be split, and others (like Astilbe) have such a hard center that they will have to be dug in order to cut or divide them. Additionally, some plants, such as Coreopsis and Aquilegia, will produce and drop seed. These new offspring can be relocated once you learn to recognize the seedlings.

Insects & Diseases

If in doubt, ask us. For the most part, plants will resist insects and diseases on their own. You shouldn't need any spraying unless a major invasion of sucking or chewing insects moves in from somewhere nearby. Some symptoms of common insect

damage are: obviously chewed leaves; holes; or a discoloring of the foliage. There are many natural and chemical products on the market which can help. It's always okay to use an all natural insecticidal soap, (ex. Safer's Soap). A general purpose fungicide can be a good preventative measure if the summer is particularly soggy. Insect damage is often temporary and actually supports some beneficials like butterflies. Neem Oil is a good choice for a natural insecticide that also works as a fungicide. It is very safe for birds, fish, bees, and wildlife.

Frequently Asked Questions

The frost free date for my area is several weeks away—did I receive my plants too soon? Perennials tolerate frost and freezing very well and are best planted at least 4-6 weeks ahead of your frost free date. After several days in the ground they can tolerate temperatures as low as 26 degrees. Newly planted plants can be protected from an unexpected freeze the first few days with a sheet of newspaper weighted on the sides with some soil. Remove whenever temps rise above freezing.

When will my plants flower? Most perennials will flower their first year and will be even more outstanding in their second growing season and beyond. They'll be too busy growing the first year to flower at their fullest. As a rule of thumb, spring flowering varieties will often have flowered before we ship to you and summer flowering varieties will put on 2/3 of their show, but a bit later than usual their first season. Fall flowering varieties will almost reach full size, and put on a nice show their first year. Mums will reach full size and full flower their first year.

Are the sun/shade requirements good for my location? Yes, but gardeners in the deep south should err toward more shade when planting, whereas extreme northern gardeners should err towards more sun.

How late in the fall can I plant my order? Perennials need 6 weeks of growing before the ground freezes to anchor themselves for winter. We ship in the fall from early September through to late October. The farther north you are the sooner you would want to receive your order. For spring flowering bulbs, the best planting time for colder northern climates is from late September to October, though we have successfully planted bulbs here in northeast Ohio as late as December. Gardeners in warmer climates can plant bulbs in December or later. Store your bulbs in a cool, dry place until ready to plant.

I can't plant my order right away. What should I do? Set your plants outside in dappled shade. If it's forecasted to go below 32 degrees Fahrenheit you'll want to keep them in your garage or porch overnight. All varieties except Mums can take a hard frost. Get the plants back outside the next day as they will be happiest outdoors. Water when wilting occurs. Normally, plants will get thirsty about twice a week and require a drink. If waiting longer than 2-3 weeks, feeding with a product like Miracle-Gro or Plant-tone is recommended.

Additional Care Information

Clematis Care

Clematis have some personality quirks that it helps to address. They are one of the few plants that like to be planted deeper. Pick a full sun site and have your trellis in place. Have a deep hole dug – 8-10" – with some compost in the bottom. Gently place the pot (minus the wrapper) into the hole so that the first set of leaf nodes (the bud where the leaf sprouts from) is below ground. Remove any leaves that will be under the soil. Fill the hole halfway and tie the top growth to your trellis (leave the stick it shipped with in place for now) and water. Finish filling the hole with good soil, and water well. Your Clematis will appreciate a low growing plant at its feet to shade its roots.

Pruning: Pruning Types are noted on the plant tag.

Type 1: Flowers are produced on old stems so prune immediately after flowering. Remove any dead or weak stems. Tie stems of any new growth into place as they lengthen.

Type 2: First flowering comes from old stems and then later flowering occurs on new growth. In early spring, look for swelling leaf buds beginning to show. Remove any dead brittle material above these buds. Re-tie stems as needed.

Type 3: This group blooms later and on new growth. Prune in early spring as new leaf buds begin to show. Remove any dead brittle material above these buds. Stems can be trimmed low if desired at this time to encourage branching.

Containers

Almost every plant we grow will be okay in a container for one season. The difficulty comes in wintering over the container in cold zones. Since the roots are now "above ground" in the container, the moderating effect of the soil's warmth is lost. Either transplant the perennials into your fall border, or sink the entire container in the ground. In milder zones, you might get away with protecting the container with hay bales, or by placing the container along the sheltered foundation of your house. Fertilize more often, especially if potting soil is used as it's nutrition is easily depleted.

Hydrangea Care

All Hydrangeas will need supplemental watering in long dry spells. However, well-draining soil is important for the longevity of the plant. Care is listed by species:

Macrophylla (Bigleaf Mopheads & Lacecaps): These usually need very little pruning. Best to choose a spot where they can grow to their natural height. If desired, prune soon after flowering before bloom buds are set for the next year. Pruning before or after this will reduce or even prohibit blooming the next year. Removing dead flower heads is fine any time. We find the

easiest is to simply remove any dead canes (or tops of canes) that have not leafed out in the spring.

Paniculatas & Arborescens: Can be pruned any time except when they are forming flower heads in the summer—and will not need to be pruned every year. Remove crossing branches and shape when necessary. These bloom on new season's growth. Paniculatas can be trained into a tree form by encouraging a strong central trunk.

Serrata: Easiest pruning is to simply remove any dead canes after the hydrangea sprouts in the spring. Compact habit requires less pruning, making this a low-maintenance plant.

Quercifolia (Oak Leaf Hydrangea) Can be left untouched, or previous year's wood can be pruned back to leave only two buds at the base of each stem in very early spring. Pruning in this way encourages large flowers.

Ornamental Grass Care

Many Ornamental grass varieties feature striking flowers stalks which look great in the winter months. Before the next growing season begins it's a good idea to trim the stalks down—usually to about 4-6" above the soil level. If the stalks should become unsightly or broken at any time, they can be trimmed any time.

The following varieties will benefit from cutting back most of the foliage in late winter to early spring:

- **Acorus** (*Grassy-leaved Sweet Flag*)
- **Calamagrostis** (*Feather Reed Grass*)
- **Deschampsia** (*Tufted Hair Grass*)
- **Miscanthus** (*Maiden Grass*)
- **Molinia** (*Purple Moor Grass*)
- **Muhlenbergia** (*Pink Muhlygrass*)
- **Panicum** (*Switch Grass*)
- **Pennisetum** (*Fountain Grass*)
- **Schizachyrium** (*Silver Bluestem*)
- **Sisyrinchium** (*Blue Eyed Grass*)
- **Sorghastrum** (*Indian Grass*)

The following varieties need the old blades "teased" out in spring:

- **Carex** (*Japanese Sedge Grass*)
- **Festuca** (*Blue Fescue*)
- **Hakonechloa** (*Hakone Grass*)
- **Helictotrichon** (*Blue Oat Grass*)

No pruning required:

- **Sporobolus** (*Prairie Dropseed*)