What's Coming Up:
Janet Macunovich answers your growing concerns
Issue 15, November 15, 2008

Here you'll find:

Don't turn your back on new additions like this globe blue spruce. All new or relocated plants deserve special attention until you know they've become reestablished. Here, learn how to water a new plant and how it will tell you "Enough!". Photo ©2008 Steven Nikkila

How well, how long to water new plants?

Mary has a few **new trees** and a few that have been moved. She asks, "**How much watering** is too much once a new tree is planted or a tree is uprooted and then moved? I've read that it's not hard to over-water them so I've been somewhat stingy."

It's too much water only if the soil is soggy, Mary. Be careful rather than stingy, and learn to recognize and aim for "moist." For most plants, being moist all the time is fine. A few species such as smoke tree (*Cotinus*) fare better if the soil on their roots becomes fairly dry between waterings. So long as you avoid sogginess and provide occasional dry time to species that need it, you can't overwater.

Soil is soggy if it drips when you lightly squeeze a handful. Strive for a no-soggy zone in the whole depth of soil where roots grow -- roughly from surface to 18 inches deep.

The best waterers **know how long water will linger around roots** because they've done a test to see how quickly excess water drains from a hole 18 inches deep. (See Box, Page 2.) Also, they've dug down several inches every few days after rain or watering to gauge how long their soil hangs onto the moisture it absorbed. Those with the quickest-draining and sandiest soils water in daily small amounts while their neighbors with slower drainage or more clay can soak an area deep and know it will last a week or more.

All plants need to be watered well to stay healthy. We **pay special attention to new plants** because for a time their **root systems aren't wide enough** to collect all the water they need. Also, the soil or potting mix that came with a new plant often **dries out more quickly or wets more slowly** than the ground it's planted in. That puts a new plant at additional disadvantage.

Give **special attention throughout its first season** to the new or moved plant. Feel the soil next to and in its root zone regularly, from budbreak to killing frost, then water as needed. Plants often use water more slowly when the weather is cool and leaves have fallen, but they do use it even then. They also do best in soil that's moist when the freeze comes since they'll rely on it to replace losses during winter thaws. So **check on new plants even in late fall**. Those under thirsty trees, near buildings that block rain or foundations that wick water up and out into the atmosphere can become dangerously dry in fall.

Keep your guard up **until a plant indicates it's reestablished**. You can relax once the plant begins producing new roots and shoots that match its **species' normal growth rate** or its own performance before the move. Measure a new shoot in late spring or length of new root in fall. Compare that to established plants of the same kind or rates listed in gardening references.

Drainage!
Heed how it seeps

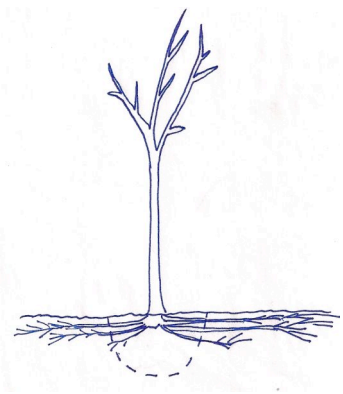
Check drainage:
Dig a hole 18 inches deep, of any width.
Fill it with water and let it drain.
Fill it a second time and note how long it takes to empty.

Then water accordingly.
If the hole empties in:

- < 6 hours. Excessively drained soil. Deep soakings are wasted. Water frequently, lightly.
- 6 to 12 hours. Well drained soil. Everything grows!
- 12 to 24 hours. Adequately drained. Let the top few inches dry between waterings or deeper roots may drown.
- >24 hours. Poorly drained. Choose species that tolerate poor drainage. Water lightly.

Why pamper a new plant?

A new plant is handicapped by root confinement or loss.



Pot production gives us uniform plants, easy packages to carry and no root loss at planting time. However, roots in pots are forced into an unnaturally narrow configuration with most tips at the bottom. Once it's planted, only deep soakings reach all root tips. Only after roots grow wide (or the smart gardener spreads them!) can the plant be expected to prosper with just regular, surface irrigation and rain.

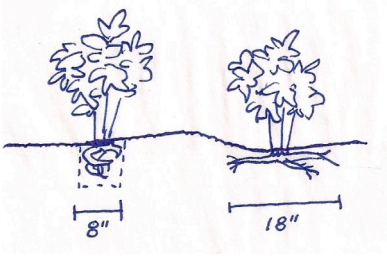
Large transplants may lose three-quarters of their root system in a move. The pre-transplant root mass may be as wide as the plant is tall, or wider, but is cut to make a ball perhaps 1/6 the plant's height. Fewer roots means less water delivered to foliage, and slower growth.

Surprising to some, a pitiful remnant root mass may rebound more quickly than some potted roots since it remains arranged normally -- with roots all running horizontally or at gentle slopes down, in layers from barely beneath the surface to a depth of 12 or 18 inches. Roots can grow out more quickly from truncated spokes than from a pot shape.

Pity what's potted: 80% water loss

A peony in an 8-inch pot has just 50 square inches of collection surface. Not much to support existing and new growth.

That same young plant with its roots spread naturally over an 18-inch circle can collect all the water that falls on 254 square inches of soil.



How long before it's established?

Herbaceous perennial: Allow just until the next spring, since what emerges then will be only as much as the roots can support.

Woody plant: Expect to baby it one year for each inch of trunk diameter.

Measuring plant growth

Woody plant branches, normal one-season growth

Slow species: Under 12 inches per year
Average: 12 - 18 inches
Fast: Over 18 inches
Roots: 2 - 3 inches for each inch of branch

Perennials' normal one season growth

Slow species: Each spring, stem count is 1-1/2 - 2 times the previous year's count.
Average: Stem count in spring is 2-3 times what it was the previous summer.

Common woody plants' average annual growth rates

Boxwood: 6 inches
Burning bush: 12 inches
Callery pear: 18 inches
Falsecypress, Hinoki, dwarf: 3 - 12 inches
Falsecypress, Hinoki, standard: 15 inches
Maple, Japanese, upright: 12 inches
Maple, paperbark: 6 - 12 inches
Maple, red: 18 inches
River birch: 18 - 24 inches
Spruce, blue: 12 - 18 inches
Spruce, dwarf Alberta: 3 inches
White pine: 24 - 36 inches
Yew: 12 - 18 inches per year, varies by variety

Acclimating a new plant: Count to 7

To help new plants make the transition:

1. Water well on planting day.
2. Check soil moisture two days later in and around root zone; water as needed.
3. Wait three days; check; water if needed.
4. After four more days, check; water as needed.
5. Five days later, check; water accordingly.
6. Let six days pass; check; water accordingly.
7. Now wait a week. The plant's been in for four weeks. All this time you've kept it well watered and been watching for when it can safely go a week between waterings. Once there, check and water it along with the rest of the garden on a weekly schedule.

Afraid to move it?
Never fear a move to a better site.

In spring I moved one of a pair of globe blue spruces that had been in place over seven years. That fall I checked the root growth of the transplant. Its roots (example left, above) grew 18-inches from where we had cut them during the move. That was more growth than made by the other plant, undisturbed except for roots clipped (right, above) as we worked on its mate. Why did the transplant beat its old growth rate in just one year? Because we moved it to a sunnier, more fertile, better drained bed where it had unrestricted space.
Photo ©2008 Steven Nikkila

Easier on plants to prune when they've hardened

P.C. writes, "I was thinking about **pruning some bushes** that need to be cut back hard, and read what you wrote about this last year. I was particularly interested in your explanation of how wood hardens off and the comment that **waiting a few weeks** would be preferable so that **hardening can finish**. Would waiting even one or two weeks to prune make any appreciable difference? So instead of pruning now I would wait until the end of November?"

Weeks, even days matter in fall hardening, P.C. Trees and shrubs may look like they're standing still as they drop leaves and stand bare but internally they are working away at great rate. **Each day they are hardier** than the day before.

Acquiring ability to survive frigid temperatures -- **hardening** -- **follows leaf fall** in pattern and timing. The leaves at tips and most exposed sides let go first, then the rest peel away in layers until at last the lowest, innermost twigs bare their buds. At the same time, tips harden, followed by cells further back along the branch, the trunk and finally the base at ground level. Weeks after the last leaves fall the base is probably still developing hardiness.

They may seem insubstantial but **even bare twigs afford shelter to basal wood**. They trap some of the warm air rising from the ground. They also send the trunk chemical signals that guide its hardening. To deprive a not-yet-hardened trunk of its twigs is to risk its death or severe damage if that pruning is followed by a quick dip in temperature.

So, **wait. Make any drastic cuts on a mild day in late November**, during a winter thaw or just before bud break in spring.

Prune off this tree's limbs on a fifty degree November day and when the temperature falls 30 degrees at sunset the base of the trunk may suffer freeze damage you won't see until the bark falls away from that dead spot years later. Photo ©2008 Steven Nikkila

Winterizing tips, chapter 5: As November ends, say "It's buryin' time!

Bury marginally hardy items such as the graft union at the base of a rose bush or tip buds of blue- or pink hydrangeas. In zone 5 they benefit from mounding over with loose soil or circling with a wire cage that's then stuffed full of airy mulch.

Ornamental grasses as salt-spray protection. Cut them* and use them to blanket beds and intercept salt spray. Take that grass away in early spring and much of the salt will go with it rather than soaking in to ruin the soil.

*Sure, you can cut them now!

Ah, now I real-eyes: When common names are Greek

I was commenting to a helper about the rarity of seedlings from burning bush when someone overheard and cried, "Lucky you! I'm up to here with it in my woods because it seeds around so heavily!"

Surprised, I asked, "It grows and sets seed in the shade?"

My helper, knowing that **more than one plant goes by the name 'burning bush'**, offered, "Maybe it's the *annual* burning bush." His hands motioned to indicate a two foot plant.

The newcomer objected and mimed a taller plant, "No, I mean the bush that turns red in fall."

Which caused my helper to comment, "The annual one turns red but it's not that big."

To clear up the increasing confusion I wrote it all out:

Perennial burning bush, a.k.a. gas plant, *Dictamnus albus*, is a sun or half-sun perennial with a long life like a peony. It sets very little viable seed.

Annual burning bush (*Kochia scoparia*) is grown for its foliage effect in sunny dry places. It's downright weedy in its self-sowing nature but breathtaking in its fall color change.

Woody burning bush, a.k.a. spindle tree (*Euonymus alatus*), is an Asian shrub commonly grown in foundation beds or in hedges. It's known for its brilliant red fall color and also its tendency to crowd out American native species by seeding into the woods edge.

The 45mph garden: Pyrotechnic pears and water-wicking willows

You can put a gardener behind the wheel but you can't take the flowers out of his eyes. Look at what's catching driver's eyes and raising questions this week.

Some people complain because callery pears and willows in a landscape means there may still be leaves falling after Thanksgiving. But gray November days would feel even chillier and look more bleak without **these last spots of color**.

Callery pear (*Pyrus calleryana*) contributes orange or maroon as well as distinctive shape to a fall landscape. Willows wait until fall's end to glow golden in low angle sun. Photo ©2008 Steven Nikkila

Callery pear (*Pyrus calleryana*) blooms white in spring before the leaves emerge. The tree may be **orange, red or maroon** in fall or columnar, spire-like or fan shaped depending on the variety. So pay attention to the plant tag or check garden references before you choose. I hate to see a gardener disappointed over a fine narrow, orange 'Redspire' simply because they thought every pear would mimic the broader, redder 'Autumn Blaze'.

Wide spreading 'Bradford' which colors red-purple in fall was once a standard bearer for callery pears, so popular that it was planted by the thousands and became the species brand name. However, that was before we learned of its tendency to drop whole limbs or split in two once it matures. So don't choose 'Bradford' unless all you want from it is a ten or fifteen year run.

Willows deserve their reputation for **fast growth and weak** wood but don't dismiss them without considering the services they can provide. No tree shows color so early in spring or later in **fall -- a warm gold**. More important, they can **draw prodigious amounts of water** from low wet ground and disperse it as water vapor. Those who remove willows from low-lying property often find the area is so mucky afterward that boots become required gear.

This week in Janet's garden

Grow with me! this week I will:

Replace annual flowers with winter color. For instance, where I remove annuals I cover the ground or stuff the pot with branches clipped from evergreens. On the bed I fan several layers of greenery to create a fake groundcover shrub. In the pot I arrange the boughs in a flat spiral or fountain spray. This way, the pretty scene we've become accustomed to seeing is not suddenly erased but filled with the subtle colors that glow in winter's low light.

Covering bare ground with evergreen boughs also protects the soil's crumbly structure, which is otherwise likely to be pulverized by winter rains.

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Put really choice evergreen branches I cut onto the cold concrete floor of the garage or into the "party pop" refrigerator that's going to be full over the holidays but is empty now. There, they'll stay fresh for holiday decorations.

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Broadcast low nitrogen slow release fertilizer before I spread fall leaves and other mulches on my gardens. You can fertilize now -- set plants up for a fast start in spring without any harm by avoiding high nitrogen and water soluble forms of fertilizers. These would only wash away before spring to become pollutants of water rather than builders of plants. I'm using organic, carbon rich products such as cottonseed meal and poultry manure (Groganic; check for it at stores that carry a wide range of fertilizers such as Uncle Luke's Feed Store in Troy, Michigan).

The best fertilizer is the farmer's footprint

Wrap-up with Grins and Grow-ans that turn our green thumbs up or down

Grins: To having a friend with a root cellar who's willing to make room there for your *Dahlia* tubers, *Cannas* roots, pots of *Bougainvillea*, *Mandevilla*, *Lantana*, *Brugmansia*, annual geranium, tree rose and other tender perennials. After being watered little or not at all for weeks and exposed to forty degree weather, the plants are now willing to idle and wait for warmth's return.

Grow-ans: To leaving my boots unprotected in the back room after wearing them as I spread poultry manure over flower beds. I forgot once again how alluring even traces of that stuff can be to dogs. I rescued the boots in time but not before my fowl-crazy pups gnawed off the heel tabs and laces!

Who's Janet?

The gardener's trainer. For over twenty years Janet Macunovich has been helping gardeners grow through her classes, books and other publications. She shares what she learns in attending classes herself at educational institutions all over the country, reading, participating in professional symposia, and applying it all in her own and client's gardens.
To learn more, email JMaxGarden@aol.com and ask for What's Coming Up, Issue #1. Email questions to her at JMaxGarden@aol.com.

Where to catch Janet in-person:

Monday, November 17, 2 p.m., "Garden by Janet - Bring your gloves and tools!" In Livonia, we're **clipping a young hemlock to refine its shape and restrict its size**. Email or call me (JMaxGarden@aol.com or 248-681-7850) to reserve a spot and learn the location. This is a limited-space workshop.

This cute young hemlock's going to stay small and be even cuter via our pruning effort. Come do the clipping with me November 17.
Photo ©2008 Margot McCormack

Saturday mornings during the depths of winter. In late January I'll host and teach in the Detroit Garden Center's 18th Annual Winter Gardening Seminar. This winter we focus on choosing great plants, saving time and physical wear-and-tear as you garden and meeting some surprisingly sophisticated native plants. Watch for more news here or check in as the snow flies for information from the Detroit Garden Center (313-259-6363).