

## What's Coming Up:

Janet Macunovich and Steven Nikkila answer your growing concerns  
Issue #153, August 10, 2011

### In this issue:

Art-cropping of rocky plants, pages 1- 4  
Nominate a crevice plant, page 5  
Tips for *Dahlia* trouble, pages 6 -7  
Mildew makes a *Phlox* go pale, pages 6, 8, 13-14  
Tiny mites with big differences, page 7  
Wahoo! Water can deter mites, pages 8 - 9  
Mite-y hibiscus is a "hit", page 10  
Big goof in oak or *Lobelia*:  
    Relying on a common name, pp. 10 - 11  
    Method of munching I.D.'s the pest, page 11  
    Saw-fly a holey hollyhock, pages 11 - 12  
    Small tool views, weedkiller news, pages 12 - 13  
    Phlox prevails despite chomping, pages 13 - 14  
    Bring on the bees, please, pages 14 - 15  
    Nothing gallant about this weed, pages 15 - 17  
    Singing weeds? Page 17  
Lawn renovation time, page 18  
Wising up to scholar trees at 45 mph, page 18  
Webbed trees, reluctant killer bees, page 19  
Who are Janet and Steven? Page 19  
Where to join us and learn, pages 20- 21  
Invite us or our expert friends to town, page 22  
Buy our books, magazines & CDs, pages 23 -24

### A rocky road? Or chance for garden's form to fulfill park's function?

We wondered **if you could comment on a garden site** in our town. It's a small but **prominent strip of plantings** on Main Street that our garden club has planted with perennials & annuals... it had to be removed (then replanted) because of road improvements. We re-arranged the plants... If you would critique and advise where to go next, that would be great.

This garden's in an art park. As an example of what happens there, local kids came to an event and drew their dogs, which were enlarged and reproduced on wood. There are also tiles that members of the community made, which a local artist put together in a mosaic. It's fun, and **people come to see their work** and what their friends did. We'd like the gardens to look better. - S.P. -



Are these spots for flowers? Or feet? Pages 1 - 3.





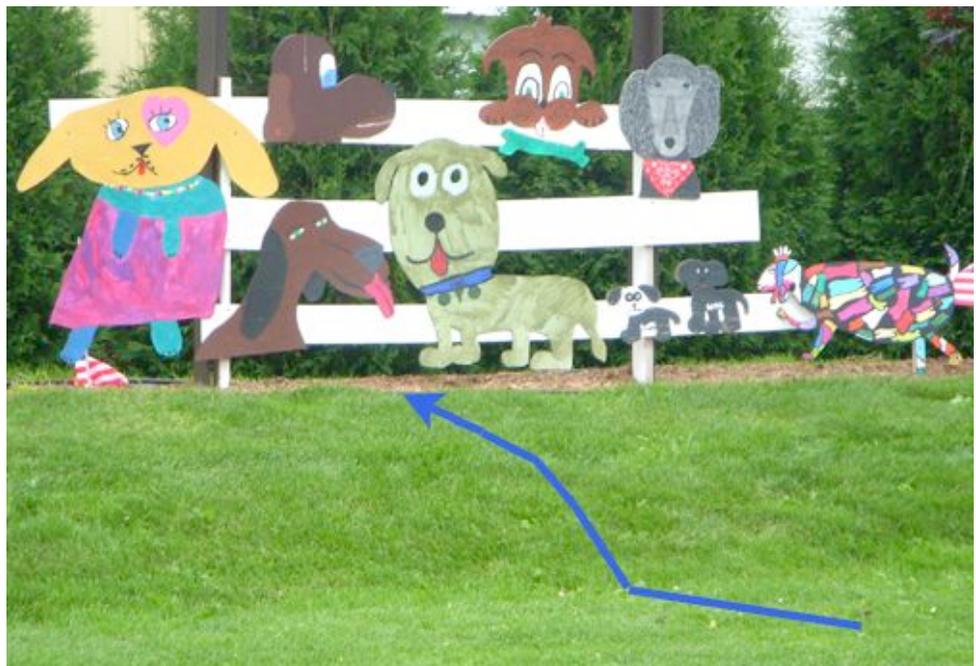
Left: Kids came to the park and drew their dogs, which were enlarged and reproduced on wood.

Below: It's fun... people come to see their work.

We **start** every design **with the question**, "Why do you want this garden?" Seems like, for this park, the only **reason for a garden** is to support and enhance the area's over-all purpose -- to draw people in and then keep them engaged.

We look at those cool dog cut-outs and can well imagine kids running right up to them to say, "That's mine!" or "Cousin Kenny painted that!"

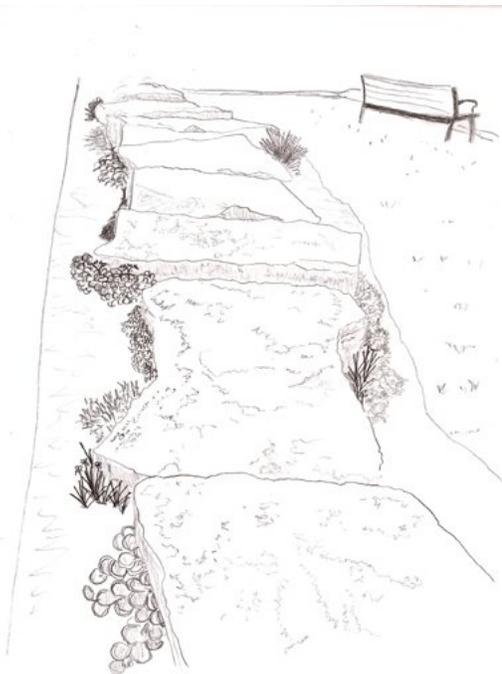
Probably parents take photos of kids next to their art. So the berm that provides an elevated place to display the current art crop (above) must also be a place for people to walk (above, arrow). Just in case you're thinking about making a garden there, or the people who mow that bump are thinking that lawn should be converted to no-mow bed, think again. Leave that turf alone. **Let visitors continue to enjoy the art up close.**



As for the **rock slabs** along the edge that was remade during road work: They strike us as another **key place for interaction**.



One look, and we want to jump on, then hop from stone to stone right down the line. However, if the plants currently there are allowed to grow into garden, chaperones will be obliged to say to rock-happy kids, "No, no, honey! Stay out of the garden." That would be a shame.



We envision alternative plantings to **enhance that stone line without barring young feet**. Plant around each rock with crevice plants. Use only true ground-huggers, less than six inches tall, so the plants can shelter below the danger zone, and will not hide the rocks. Such plants evolved on mountainsides, able to avoid being swept downhill by avalanche or rock slide because they tuck their roots under a boulder and nestle their crowns in that protected el where rock meets ground. The traffic that would kill a conventional garden -- feet taking off and landing next to each rocks -- would be nothing but containment for such plants.

**Crevice plants** come in an array of foliage colors and bloom times. We think children may like them even more than a traditional garden. Relating to the plants' small stature, kids may stoop to examine them and find enjoyment in their subtle differences.

If this vision appeals to you, too, then look for species such as those here and on page 5, to launch your design.

*Sedum rupestre* 'Angelina' loves a crevice. Its foliage is warm orange in spring (far right), gold in summer (right). It is also a fast grower that will surge out to fill any open space. Step on it, and it will die back, waiting in the crevice for its next chance to flow outward.



Above: Sea pink (*Armeria maritima*) loves crevices and would provide May color (pink or white). It could be a kids' story plant, too, as it's the evergreen tuffet that Miss Muffet chose for a seat.

Right: There are ephemeral bulbs for crevices too. Species such as winter aconite (*Eranthis hyemalis*) would add very early color.

*In addition to all its rich offerings to the body and its five senses, gardening engages the mind.*  
- Allen Lacy, in *The Inviting Garden* -

Right: Thyme revels in a crevice. Here we've just cut back the silver thyme (upper left in the picture) so its fellow rock-dwellers (*Dianthus* and *Sedum*) will have more light.

The blue flower is a *Gentiana* -- rock-loving, but too tall for the project at hand. A better blue for this situation is the, shorter, annual species rock-hound, edging lobelia (*L. erinus*).

There are also wholly different ways to go. For any given space, there are **many "right" ways to fulfill the area's function**. We pick a likely solution and explore it as a way to help other ideas pop up. We'll help you with this one by forwarding readers' comments and suggestions. (see *Nominate...* below.) We hope you'll let us know what you decide.

### Readers' turn: Nominate some hardy crevice plants

What comments do you have for this garden club, about the park, this idea or any other aspect of growing and maintaining a garden there? What have you grown that will snuggle attractively into the interface between boulder and ground, remaining very low? Email your ideas to us at JMaxGarden@aol.com We'll feature them here and also relay them to the Perennial Garden Club of Cheboygan, Michigan.

*While working among the little plants of the far places of the world we forget the narrowness of our own orbit.*  
- Louise Beebe Wilder -



### The kind of thing we learn...

...when we toss ideas out to other gardeners.

**Help for dealing with road salt** came from a lunchtime discussion, long-ago at a Lorain County Ohio State Extension conference:

*We learned about roadside plantings the hard way. They can fail miserably because road salt splashes and accumulates there. We cover the bed in fall with flakes -- sections -- from a bale of straw. Salt gets trapped there. Remove the straw before spring rains begin -- the salt goes with it.*

## Is there trouble in dahlia-ing?

Just look at what my dahlias did, and my mom's tall phlox. Can you give us any diagnosis? Is it an iron deficiency on the phlox? - N. B. -



Photos ©2011 Nancy Brumm

We've seen *Dahlias* with that appearance before, and suspected but never confirmed that it **broad mites** were at work.

**These are not spider mites**, which can be troublesome on many plants when it's hot and dry. Spider mite feeding leaves pinpoint spots that have been sucked clean of green. It makes the foliage look stippled and

dry. They prefer to feed on inner, sheltered older leaves. (See *Mite-y common...* below.)

**Broad mites** are more likely to work when **you see tip damage**, on various plants with *Dahlia* chief among them. They favor the new growth and although they're not visible to the naked eye their feeding causes very visibly **twisted, bronzed, hardened** tips, buds and leaves. (See *Mite-y common...* at right.)

Unless you see leaves under a microscope to verify broad mites' presence, **don't rule out nutrient imbalance and cold damage**.

New growth is especially sensitive to any excess or lack of essential chemicals. New shoots **may show symptoms even if there is not an actual lack** in the soil or potting mix. It happens when the plant is simply unable to take up or metabolize sufficient nutrients because of cold air, cold soil, pH imbalance, or rotted or damaged root tips (damage may occur from digging, drowning, herbicide exposure, crushing, etc.)

**So check root tips, watering and fertilization.** If you can rule out nutritional disorders, cold soil and root rot, use a strong hand lens to look for mites tucked into that new growth.

**If you see mites**, the issue becomes beating them. You may want to buy from a different grower, as the plants might have become infested at the greenhouse. Broad mites are a **hard to eradicate** pest of New Guinea *Impatiens*, various *Begonias*, ivies and other staples of the pot plant market.

## **Mite-y common but wholly different**

### **Spider mites:**

Very tiny. Usually only visible to the naked eye as very large, fully mature specimens. Adults may range in color from greenish to red-orange and might display two spots on their back, thus their alternative common names of red spider mite or two-spotted mite.

Spider mites host on many plants. They proliferate in hot, dry conditions and so may be worst on one side of a plant and favor older, sheltered foliage.

Feeding creates pinpoint spots as all green chlorophyll is sucked out, so the leaf is stippled with tiny light marks. Leaf surfaces, especially undersides, look dusty-dry and scruffy as if afflicted with dandruff when mite egg shells, shed exoskeletons and dry leaf tissue accumulate. In very high density infestations, webbing may be visible. Leaves eventually turn yellow or bronze and drop off the plant.

Regular rinsing of foliage is an effective control for light or localized infestations because this type of mite cannot persist where humidity is high. Insecticidal soap, miticide and oil all may be effective if applied to both leaf surfaces. Predatory mites can be released.

### **Broad mites:**

Microscopic, and fast moving except when cold.

Especially likely when it's very warm, on greenhouse grown plants including *Dahlia*, *Impatiens*, *Verbena*, ivies, *Fuchsia*, *Pelargonium* (annual geranium), *Cyclamen*, mum.

Feed on new growth and in buds, causing tips and young leaves to become stunted, twisted, shiny, bronzed, brittle and hardened. Buds don't mature and flowers that do open may be severely distorted. Leaf edges may cup, turning under. There may be bronzed, dry areas between the veins on the leaf underside.

Destruction of infested plants is the most common control method. Insecticidal soap, miticide and oil may be effective but the mites may be very well sheltered within tightly coiled new growth or under leaf sheaths. Yet all must be eliminated since even a few broad mites can do a great deal of damage. Predatory mites can be released; order those that are specific to broad mite control.

To control them in the garden or planter, you might try coating all tips weekly with insecticidal **soap or horticultural oil**. Use the type of oil that's distilled at low temperatures to be very light, called "superior weight" or "growing season" oil. Alter the killer you use each time, to counter the resistances these long-fought pests have developed. Stick with that regimen until new growth develops normally.

**Another option is to buy predatory mites** from bio-control catalogs. If you opt to buy predatory mites, you do not want standard species that hunt spider mites, as those mites don't hunt on the tips of the plant. Shop for *Amblyseius swirskii*, the swirskii mite, or a predatory mite in the *Neoseiulus* genus (*N. barkerii*, *N. cucumeris*). Reports we've read say releasing just 10 predators per plant brought the broad mite numbers to zero. Buying predatory mites can be pretty expensive-- worthwhile for a grower (these same mites get on peppers and other veg crops so controlling them is big business) but maybe not for us.

### Head swirling with beneficial insects' technical names?

As with plant names, you don't have to be able to pronounce it, only spell it out! The scientific name of an insect -- harmful or helpful -- is the key to a great deal of data.

Using them, we've found much help, for ourselves and our readers, in Extension publications and from bio-control companies such as koppert.com (supplier to professional users of pest controls) and arbico-organics (sells to all, including home gardeners).



Tall *Phlox* varieties with a myriad of tiny flowers, such as 'Jeana', are magnets for bees and butterflies. See page 14 for why we should care about such pollinators.

The **phlox discoloration is almost certainly mildew**. (However, if you look under the leaf and find evidence of spider mites-- scruffy dandruff on the leaf underside -- we'd believe that, too.) Mildew fungi invade the leaf during infective periods in late spring, destroy its chlorophyll, weaken it and leave it discolored this way. In a *Phlox* susceptible to mildew, significant leaf damage can develop long before conditions are right for the fungus to sporulate -- make that white/gray coating we see and most people know as mildew. Encourage your mom to **switch to a mildew resistant phlox, divide the plants or thin the stems** of each clump to just 4 or 5 each spring, and/or use a fungicide from late May (when the fungus first begins to grow). See page 13 for expert grower **Karen Bovio's *Phlox* report** in *Tip Cuttings* this week.

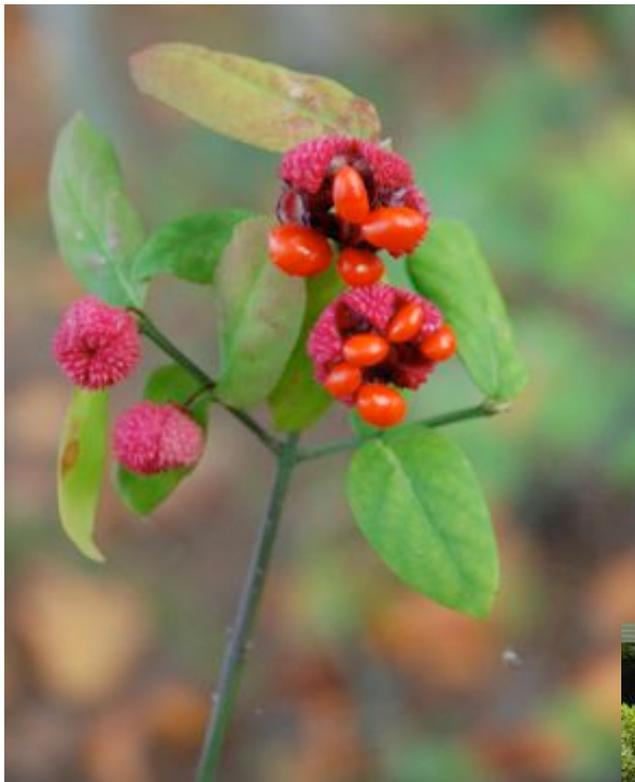


Photo ©2011 Nancy Brumm

## Wahoo proof of water's power over mites

We have two north American **wahoos** - native burning bushes - which have the form of wide, short trees with beautiful rosy pink leaves in October. One **succumbed to two-spotted spider mites** about 8 years ago, much to our chagrin.

We allowed suckers from its roots to grow, and now have a full bush about 5' x 5' coming along. Its companion still survives well as a tree form. We make sure it stays moist, as defense against mite build up. We allow many leaves from the lawn around it to decompose as mulch under it too, and that helps to retain moisture. - L.N. -



We have a special fondness for wahoo (*Euonymus atropurpureus*) for its alternate name, hearts-a-burstin'. Kids latch easily onto that name when they see it in fall with its pink seed pods dangling and popped open to show bright orange seeds. Now we like it even more for its come-back-ability. Thanks for the report!

Below: What a pleasure to watch a professional at work with a water wand. Clean leaves are healthy leaves, and plain old water can rinse off insects, insect eggs, and fungus spores. So plants susceptible to mites and fungus appreciate a shower. See the Michigan State University Horticultural Demonstration Garden staffer water the soil, then rinse the plant's foliage from below and from above.



*People think watering is a job the new person can do. Wrong. You put your best person on watering, because it's the main thing.*  
- Sylvia Graye, Graye's Greenhouse -

## Aiming for Answers: Hit or Miss?

There are no sure bets in dealing with living things, but every situation we face helps us learn more possibilities -- especially when we share with each other what we've observed. So we're always glad to hear whether you used our suggestions, and what happened next.

...thank you for the pictures of the *Hibiscus* with mites. I have one that was recently given to me as a gift, so their upkeep is new to me. It has developed the same looking leaf. Surprise, surprise....on further investigation there were little bugs crawling around. You wrote in issue #150 "plain old cool water is the best remedy," so I'm about to give it a good shower and **keep it away from the other plants**. - J.G. -

Glad to help.

Now, thank *you* for including the note about quarantine for that plant. Those spider mites that plague tropical hibiscus can host on many species, so it is **a good idea** to limit the chance that they will crawl, blow or fall off onto other plants. It's also smart to wash your hands between plants, if you're the plant petter that most gardeners are.

That mite-plagued *Hibiscus* we showed you in issue #150 (right, above) is looking much better now, six weeks later (right, below). The credit goes to increased light (its gardener moved it outdoors for summer), a new pot with a little more root space, and regular showering. Is it completely free of mites? Probably not, but it's strong enough now to grow faster than those pests can feed, and is probably producing its own internal mite control as well.

Most plants do create chemicals that deter pests, when they have plenty of light energy to work with and other conditions are right for their species. So if one of your plants once had mite problems in the low light of your home, watch for them and give the plant help earlier in subsequent winters.



## Big mistake, big lesson: Title

Since **mistakes are learning experiences**, our biggest blunders could be viewed as great treasures. If only we didn't have to pay the price!

Can we avoid the cost and advance as a group by pooling our bloopers? Let's try. Here's a **worst mistake submitted by one-who-will-remain-anonymous**:

Don't make this mistake! Please **warn people about ordering plants by common name**. We *knew* the Latin name of the oak we wanted but when we saw in the catalog the common name we knew, Chinkapin oak, we didn't double-check! We ordered it. Now, love the tree we have (*Quercus muehlenbergii*) but it's not the *dwarf* chinkapin oak we wanted (*Q. prinoides*). The tree we have **will eventually be 50' tall or maybe more, where we wanted the 15-foot species!**



**Oh what a difference the name makes!** Hybrid *Lobelia*, a.k.a. cardinal flower (a great result from a complicated cross between native red and blue cardinal flowers) is *Lobelia speciosa*. It can garner a lot of attention in August when it contributes its 36" flower stems to the show being made by wetland and woodland natives such as Joe Pye. Yet if you don't pay attention to its whole name and say simply "Lobelia" when you search for it, you may end up with its cousin, edging *Lobelia* (*L. erinus*) -- it's also blue but only 6 inches tall.

### Tip cuttings: Growing on from what people are saying this week

So much goes on in email exchanges between newsletters! We wish we could include it all. Excerpts:

#### Read the damage, guess the pest

...I hate to get close to bugs but I know it can be worth it, now you've made me look. I'm seeing

that different insects have different ways of eating. For instance, slugs don't make holes on the *edge* of a leaf, beetles and caterpillars do that. And some bugs sting the leaf, kind of a like a mosquito stings a person, and it leaves a dead spot, whereas a lot of beetles scrape the leaf like I scrape the fruit out of a watermelon rind. I recommend other people look close, too, and then go figure out what's eating their plant. Look on-line for damage that

matches the pattern. - D.T. -

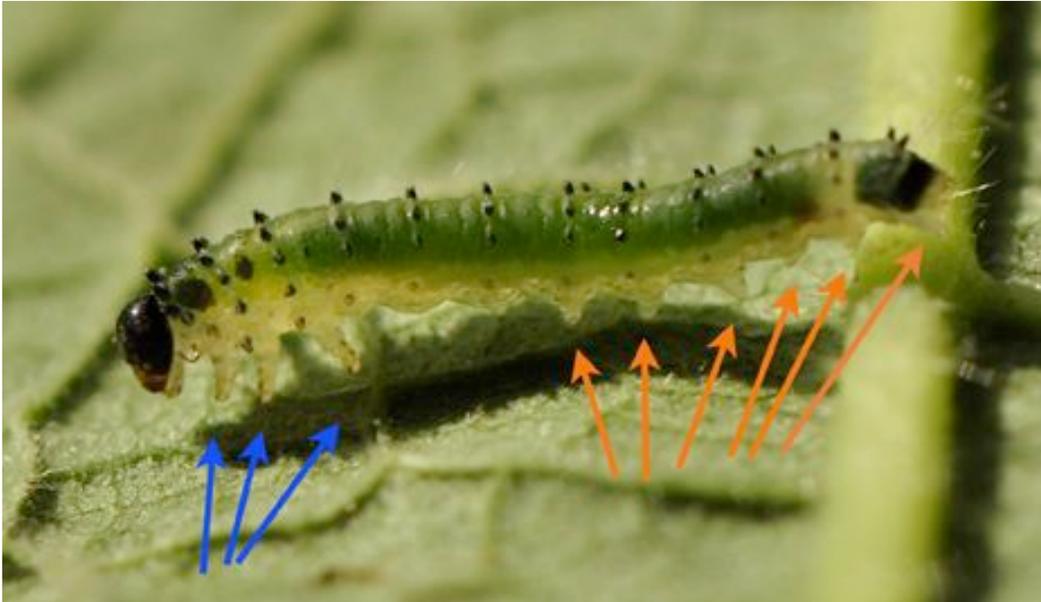
Bravo for overcoming your reluctance. You may be ready for another step -- see below.



Left: The squeamish gardener or untrained eye may see only a **holey hollyhock leaf**, even given the orange arrows we added to pick out the hollyhock sawflies doing the damage. Zoom your computer screen to look again. Bet you see at least 4 or 5 of them. But... Read on..



Below: The more you look, the more you'll see! Don't discount the littlest munchers (orange arrows).



We know these are sawfly larvae, destined to grow into gnatty relatives of ants and wasps, not caterpillars on the way to butterfly- or moth-hood. We know because we counted the pairs of prolegs. In front are its true legs -- 3 pair, like all insects (blue arrows). Prolegs (orange arrows) are the hind-end, false-leg grippers it'll shed in entering its adult state. More than 5 pairs of prolegs makes it a sawfly. (The 6th pair at the tail end is indistinct here but easy to see in action.)

(There's more about hollyhock- and *Hibiscus* leaf eaters in What's Coming Up, Issue #151.)

### Big box store has tools for small adults

...I was shopping for kids' tools for our volunteer workers at church. Menards sells the Ames True Temper line of "Real Tools for Kids". They were NOT plastic toys but the real thing.

The leaf rake was a nice quality and the handle was **perfect for our shorter adults**. I kept having to "rescue" it for the kids to use! Unfortunately, our local Menards had already sold out of the garden spades, and hoe. But they may be available on-line. Not landscaper quality. But decent and reasonably priced. - A.D., Sun Prairie, WI -

### Re Issue #152: Herbicide updates and natural alternatives

...thanks for the heads-up about the lawn weed killer that's killed so many trees. Thought I'd let you know that as of August 11 **the EPA has banned the sale of Imprelis**. The New York Times reported it. - D.M. -

[www.nytimes.com/2011/08/12/science/earth/12herbicide.html?\\_r=1&emc\\_etal](http://www.nytimes.com/2011/08/12/science/earth/12herbicide.html?_r=1&emc_etal)

What about **corn gluten meal as a weed killer**? - T.C. -

So we should keep herbicides out of **a tree's root zone**. **How do we know where** that is? - T.W. -

Corn gluten meal can suppress the germination of some seedlings. It doesn't have as high a suppression rate as some manufactured herbicides. It comes from corn but it's still a herbicide, and by definition that means it has a deleterious effect on some plant species. So we follow the same line regarding its use. Check its effectiveness against the weed(s) you're dealing with and apply it only where you have a problem with that weed and no better way to deal with it.

An established tree's roots extend at least as far as its branches and often two to three times as far. If you're in Michigan perhaps you picked up the June issue of Michigan Gardener magazine and read Janet's article *Roots: Under foot, out of mind*. About 20 years of our work is included there, including a diagram of the average yard with a large tree. Much of that tree's root system is in *neighbor's yards*.

### Fixes for *Phlox*

From the current bulletin issued by expert grower Karen Bovio of Specialty Growers in Howell, Michigan, comes this about tall *Phlox*:

...Just about anyone who lives in a rural area knows that *Phlox* are a preferred food of **deer**. We found out this year, that woodchucks (**groundhogs**) **love them** just as much! With three active woodchuck burrows on our property, we couldn't keep up with their appetite, and our plants suffered considerable damage. We had almost given up hope on them when we managed to get the critters under control. We've trimmed the plants, fertilized them, and all are recovering beautifully! Many will bloom later this summer, on well-branched plants!



For best results with *Phlox*, grow them in full sun or light shade, in rich, moist soil supplemented with organic matter. If you live in a deer-inhabited area, make sure to use a repellent. Woodchucks, we found, are a bit harder to control, but there are some products on the market specifically designed to repel woodchucks.

Fertilize *Phlox* yearly, and don't forget the all-important step of *thinning the number of shoots in a clump by one third to one half, each spring*. Yes, that means REMOVING one third to one half of the stems (of an established clump) in spring, by cutting them off at ground level. By selecting only the largest, most vigorous stems, you'll reduce the incidence of Powdery Mildew. You'll increase the air-flow through the clumps, and mildew will be less likely to take hold. There's another benefit to this practice: the remaining stems will produce larger, more dramatic flower heads, since the shoots are not in direct competition with each other. If you are hesitant to take such drastic measures, we encourage you to try it next spring with some of your *Phlox* plants. Compare yourself, and see if you don't like the results!

Subscribe to Specialty Grower's newsletter by sending an email to Karen at [SpecialtyGrowers@comcast.net](mailto:SpecialtyGrowers@comcast.net)

### Help the bees, please!

Early June: Where are the damblam pollinators? I've had maybe a half-dozen bumblebees all year and absolutely no honeybees. None. zip. Zero.

Early August: ...I found to my happiness that all the bees are at Matthaei (Botanical Gardens)...

- B.C. -

Both your observations are probably accurate. Bees have been in short supply, but may be rebuilding their numbers a bit now. We hope every gardener will do what he or she can to **support local bees**, the various native species (right) as well as the European honeybees that work in your yard. Most of these insects are not aggressive unless aggravated and without them we'd be in deep you-know-what, agriculturally speaking.

We have also heard from beekeepers and bee watchers that these vital players in the plant world are **currently down and out**. Keepers who last fall had five or six hives came out of winter with only one or two. According to Paul Kozak, Provincial Apiarist for the Ontario Ministry of Agriculture, Food and Rural Affairs, the bad winter was just one more in a lengthy list of bee woes during recent years, including parasitic mites, fungal- and viral



Photo courtesy of Paul Kozak ©2011

pathogens and pesticide use (in which bees can be collateral damage, and insecticides take a heavy toll). Native pollinators also face loss of nesting and foraging habitat.

Kozak offers **potential solutions we can implement**: Conserving wild and foraging habitats, native bee nests in backyards, planting bee-friendly flowering plants, and less use of pesticides to deal with plant cosmetic problems. He also recommends these resources for the conservation of native pollinators:

The Xerces Society for excellent books on native bee conservation  
<http://www.xerces.org>

Canpolin, a Canadian initiative for pollinator conservation  
<http://www.uoguelph.ca/canpolin/>

The Ontario Ministry's apiculture webpage  
<http://www.omafra.gov.on.ca/english/food/inspection/bees/apicultu.html>

The Ontario Beekeepers Association  
<http://www.ontariobee.com>  
(We may all be surprised to learn we have local beekeepers' associations, such as [www.michiganbees.org](http://www.michiganbees.org))

*The Forgotten Pollinators* by Stephen L. Buchman and Gary Paul Nabhan, one of the most complete books on the subject of native pollinators.

Kozak also points us to Paul Kelly at Townsend Honey Bee Research Lab, who recently produced an excellent brochure on planting a bee-friendly garden. It was so popular it's completely sold out but you can contact him about the second printing: [pgkelly@uoguelph.ca](mailto:pgkelly@uoguelph.ca)

## This week in our garden

### Grow with us! This week:

We implore Garden Gods: We *do* love to learn but could we *please not learn any more new weeds this year*?! This week, the new one is a plant we've run into now and then, but never before in force. We didn't even feel the need to learn its name before. Now, as with all formidable foes, we've learned its name. We took to heart the counsel we were given long ago, that it's always more powerful to curse a thing by its name.

Here you go, for you who need to **know it to curse it**:

**Hairy galinsoga**, a.k.a gallant soldier, quickweed (*G. quadriradiata*). An annual but so prolific in one year and then building up year to year that it can render vegetable fields unusable. Where it's become bad, consider sowing a cover crop to crowd it out and suppress its germination.

[http://www.nobanis.org/files/factsheets/galinsoga\\_quadriradiata.pdf](http://www.nobanis.org/files/factsheets/galinsoga_quadriradiata.pdf)

...weeding is the most peaceful... outdoor task... soothingly monotonous but pleasingly varied... shutting out anxious thinking and furnishing an excuse for not doing some other less pleasant job.

- Bertha Damon *A Sense of Humus*



Quickweed, indeed. Galinsoga seedlings quickly outgrow neighbors.



\*\*\*\*\*

**We develop envy for other gardeners' support systems.**

While looking into our new weed, we became a little green with desire for the resources available to other gardeners. Sure, we identified our weedy pest soon enough by using *Weeds of the Northeast* (Richard H. Uva, Joseph C. Neal and Joseph DiTomaso

published by Comstock/Cornell) and on-line.\*

\*Image and sound advice at <http://njaes.rutgers.edu/eweeds/weed.asp?galinsoga>

Yet we also came across the publication that **Manitoba gardeners can pick up for free** at the provincial agriculture office -- 25 pages of seedlings in full color, a chance to recognize the weeds from day one. Look for it, you lucky dogs: *Weed Seedling Identification Guide*\*\*

\*\*Copy this URL to your browser [www.gov.mb.ca/agriculture/crops/cropproduction/gaa01d29.html](http://www.gov.mb.ca/agriculture/crops/cropproduction/gaa01d29.html).

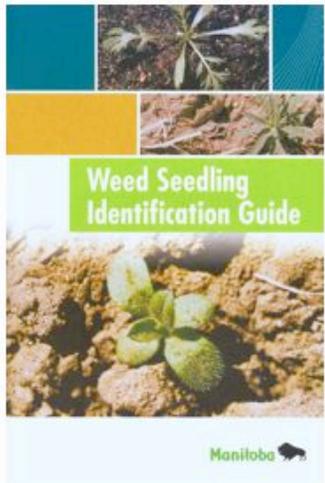
Manitoba Agriculture, Food and Rural Initiatives  Printer F...

Gov Home > Manitoba Agriculture, Food and Rural Initiatives > Crops > Resources & Publications > Guides & Publications > Weed Seedling Identification Guide

## Weed Seedling Identification Guide

Correct weed identification is crucial when choosing in-crop herbicide options. This guide is unique by offering weed identification early in the season when it is more difficult to tell small seedlings apart. The Weed Seedling Identification Guide is handy to have early in the year to make timely decisions on herbicide choices based on which weeds are present.

This guide features 58 photographs and descriptions of broadleaf and grassy weed seedlings common to Manitoba. Broadleaf weeds are grouped according to cotyledon shape and a description of true leaves and other plant characteristics is included. Information is provided on identifying features such as auricles and ligules on grassy weeds.



|  |
|--|
| <b>Pages:</b> 25   |
| <b>Price:</b> Free   |
| <b>Available from:</b>   |
| <ul style="list-style-type: none"> <li>• <a href="#">MAFRI GO Teams Offices and Centres</a></li> <li>• MAFRI Publications<br/>809-401 York Avenue<br/>Winnipeg, Manitoba R3C 0P8<br/>Fax: 204-948-2498<br/>Email: <a href="#">Publications Distribution</a></li> </ul> |

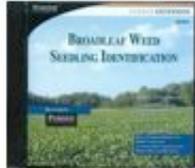
Although, with perseverance we did find **other great weed I.D. tools on-line:**

[www.cottoncrc.org.au/content/Industry/Publications/Weeds/WeedIdentificationTools/SeedimagesforidentificationRelativesize.aspx](http://www.cottoncrc.org.au/content/Industry/Publications/Weeds/WeedIdentificationTools/SeedimagesforidentificationRelativesize.aspx)

[www.extension.umn.edu/distribution/cropsystems/DC7376.html](http://www.extension.umn.edu/distribution/cropsystems/DC7376.html)

And were left with the puzzle: How did Purdue **get weeds to make noise...**

<https://mdc.itap.purdue.edu/subcategory.asp?subCatID=306&CatID=12>



### Broadleaf Weed Seedling Identification CD

This CD is features effective multimedia coverage (hundreds of color photos plus digital sound) of 57 broadleaf species. Views of each species include whole seedling, cotyledon, first true leaf, other true leaves (upper ...

\$25.00 

[More](#)

\*\*\*\*\*

Line up the equipment we need to **core aerate and overseed some lawn-gone-to-weeds**. Even the sod webworm moths, recently seen skim-hopping across the turf, couldn't find much grass on which to lay eggs. So we knew it was time for renovation. No sense here in considering weed killers. The aim must be to fix the underlying problem -- compacted soil.

Late August to mid-September is the **best time to seed a lawn** (start from scratch, renovate or overseed) in northeastern and midwest North America.

## The 45mph garden

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.



**Scholar trees** (*Sophora japonica*) are in bloom. Isn't it something, how you may never see a thing at all, and then once it's pointed out (left, and bottom left) you start seeing them all over (below, right)? It's a fine small tree for sun, durable and self sufficient once established.



*I think that I shall never see  
A billboard lovely as a tree.  
Indeed, unless the billboards fall  
I'll never see a tree at all.  
-Ogden Nash -*

**Green thumbs up** to leaving to others the excitement and secondary benefits of trees totally **covered with spider webs**: In March, 2011 The Guardian newspaper reported an unexpected side-effect of the flooding in parts of Pakistan. It was that millions of spiders climbed into the trees to escape the rising flood waters. Because the water took so long to recede, many trees became cocooned in spiders' webs. People in that part of Pakistan reported that there were **less mosquitos** than they would normally expect.

**Green thumbs down** to stings when we, the stingees, **feel sorry for the sting-er**. We mean those times when an otherwise gentle bee lashed out only because it became tangled in Janet's hair, or wound up inside Steven's shirt after he reached down from above to cut out a seedy stalk. The poor creature was enveloped just like when Steven's loose, short sleeve slipped down over the stem, bee and all..



### Who's Janet? Who's Steven?

**A professional gardener and educator** since 1984, Janet Macunovich designs, plants and tends gardens through her business, Perennial Favorites. She teaches and writes about gardening at schools, conferences, in her books, this weekly column, the monthly Michigan Gardener and other publications.

**He's a guy who sees not a beautiful plant but exactly where a gardener fits into a picture.** Steven Nikkila's a horticultural photographer who's also planted hundreds of gardens in dozens of different situations in running a gardening business with his wife, Janet Macunovich. That work's paired him with people whose gardening experience levels have ranged from just sprouting to heavily branched. Steven's history of showing so many people "how to" plus his own broad knowledge of what has been or needs to be done in a garden adds to his photos. His alterations in composition, angle or light have caused thousands of gardeners to say "Oh, I see!"

Email questions to Janet or Steven at [JMaxGarden@aol.com](mailto:JMaxGarden@aol.com) or call 248-681-7850.

*The man who has planted a garden feels that he has done something  
for the good of the whole world.*

- Charles Dudley Warner in *My Summer in a Garden* -

## Where to catch Janet and Steven in-person:

Chances to *Garden by Janet and Steven* -- observe or try your hand. These sessions are free but require registration. Here's the what, where and when. See page 21 for more about the why and how of such sessions.

**Thursday, August 18, 9 a.m. - noon, *Garden by Janet & Steven* in Waterford, Michigan.** The objective this session is *transplanting and pruning* Japanese maples. Come to observe or to pitch in with any work and learn by hands-on. This is a free, limited-size workshop. Call or email Janet & Steven to register; we'll provide you then with the address and directions. Provide a telephone number in your email or when you call. JMaxGarden@aol.com, 248-681-7850.

**Friday, August 19, 9 a.m. - noon, *Garden by Janet & Steven* in Rochester Hills, Michigan.** The objective this session is *pruning* to reduce the size of a crabapple. Come to observe or to pitch in with any work and learn by hands-on. This is a free, limited-size workshop. Call or email Janet & Steven to register; we'll provide you then with the address and directions. Provide a telephone number in your email or when you call. JMaxGarden@aol.com, 248-681-7850.

**Friday, August 19, 6-8 p.m., *Garden by Janet & Steven* in Dearborn Heights, Michigan.** The objective this session is *pruning* to reduce the size of a weeping white pine, star magnolia and other woody plants. Come to observe or to pitch in with any work and learn by hands-on. This is a free, limited-size workshop. Call or email Janet & Steven to register; we'll provide you then with the address and directions. Provide a telephone number in your email or when you call. JMaxGarden@aol.com, 248-681-7850.

*Thanks for all the years of advice. You have the best practical advice... easy to understand, remember... Keep it up!*  
- Chris Ward -

**Monday, August 22, 8-10 a.m., *Garden by Janet & Steven* in West Bloomfield, Michigan.** The objective this session is *pruning* a full size yew tree to maintain its size and natural appearance. Come to observe or to pitch in with any work and learn by hands-on. This is a free, limited-size workshop. Call or email Janet & Steven to register, and to learn the address. Provide a telephone number in your email or when you call. JMaxGarden@aol.com, 248-681-7850.

**Friday, August 26, 9-11 a.m. *Session is filled, Garden by Janet & Steven* in Hartland, Michigan.** The objectives this session is *laying out a garden* and determining what to do for a young tree that won't "take." Observe, or to pitch in with any work and learn by hands-on. This is a free, limited-size workshop.

**Saturday, August 27, 8 - 11 a.m., *Garden by Janet & Steven* at the Detroit Zoo, Huntington Woods, MI, Woodward Avenue at I-696.** Your chance to volunteer at the zoo in exchange for Janet's & Steven's hands-on instruction in perennial garden renovation, division and transplanting. For instructions how to join us, send an email to mstgarden@gmail.com with the subject line "I'll volunteer at the Zoo."

**Thursday, September 29, 5:30 p.m., *Garden by Janet & Steven* in Macomb Township, Michigan,** to diagnose and determine what to do for an ailing shade tree. Come to observe or to pitch in with any work and learn by hands-on. This is a free, limited-size workshop. Call or email Janet & Steven to register, and to learn the address. Provide a telephone number in your email or when you call. JMaxGarden@aol.com, 248-681-7850.



## Invite Janet or Steven or their expert friends to your club or community.

We go where we're invited! That's taken us all over the country and then some over the past 20 years. We address many topics, drawing from our list of **100+ talks**. We also continue **to meet groups' needs** and expand our horizons with new material and "hybrids" from our basic 100.

So, we're game for...

- a **how-to lesson for a garden club** meeting,
- a **hands-on workshop** at a site of your choosing or
- a **multi-part class** for a small group!

We can also connect you to one or a whole line-up of other experts who know how to explain how-to. So give us a **call or send an email** to make a date, request our list of classes and talks or get a referral. **JMaxGarden@aol.com** or **248-681-7850**. Our calendars fill about a year in advance for spring weekends, and six months ahead for most other times.



Steven Nikkila and Janet Macunovich (above, Janet leads a hands-on pruning workshop) have been digging, shooting and teaching how-to for 22 years. They began producing conferences in the '90s and ran a gardening school for 12 years, featuring expert instructors who knew their stuff in a garden as well as knowing how to get their messages across in front of a group.

## Time to garden your walls...



Steven's decorated many walls with great garden and Nature images. He can help you do the same with photos that capture the garden beauty you love, framed or on canvas to your specifications.

You can purchase hard copies or high-resolution versions of any of Steven's images you see in *What's Coming Up*.<sup>\*</sup> Or name a flower, type of scene or hue in mind you can request that dream. His library includes tens of thousands of plants and natural images. Email us at [JMaxGarden@aol.com](mailto:JMaxGarden@aol.com) for details, to request a sampler or to place an order.

Prices for **Steven's garden art** vary with your wishes in format and size. Examples:

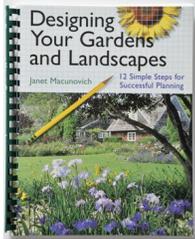
- **Matted, framed**, overall 11 x 15", \$48
- 36 x 48' no-fade **cloth tapestry**, \$215

Describe your dream image or color to Steven at [JMaxGarden@aol.com](mailto:JMaxGarden@aol.com). He'll send you a photo sampler and price list.

<sup>\*</sup>Images in our newsletter are depicted in low-resolution to facilitate e-mail transmission. Steven's originals and art created from them are full resolution, with so much clear detail they are sharp even as wall-size cloth banners.



**You asked for our advice "on paper". We wrote and sell these books plus CDs:**



***Designing Your Gardens and Landscapes***

First published in 1990 as *Easy Garden Design*, a 150-page step-by-step recipe that's become a design classic. Janet developed, uses and has trained thousands of others to use this process. People say: "This is exactly the simple, clear approach I need!" This design process is applicable world-wide.

Soft cover, spiral bound. B&W illustrations by Janet. \$19.00

***Caring for Perennials***

Janet's unique approach to perennial care how-to, the real-time story of one bed from early spring to season's end. The 180 engaging and fact-filled pages make you part of all Janet does and you might ever need to do in each task's appropriate season and sequence. Includes a chart of what to do, when for 70 top perennials. Advice in this book is applicable in all of temperate U.S. and Canada. The perennial chart includes a key to adapt its timing for far southern or northern edges of that range.

Soft cover book. Text by Janet Macunovich. Color illustrations by Steven Nikkila. \$20.00



***Asking About Asters CD.***

A digital library of six years of Janet's work: weekly columns, newsletters and over 200 extra Q&A letters to individual gardeners. 1,681 questions answered about soil preparation, fertilizing, pruning, design, choosing plants, foiling bugs and much more. No repeated topics. Fully indexed; the entire collection can be searched from one index.

1 CD in jewel case, Windows- and Mac compatible. \$20.00



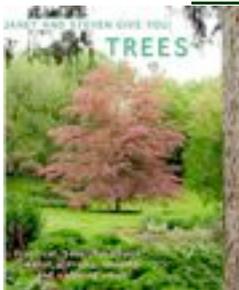
***Potting Up Perennials CD. New for 2011***

Practical, beautiful answers about perennials and all kinds of flowers, trees, shrubs, design, pruning and much more is in this collection of 2009 & 2011's *What's Coming Up*. Includes 101 issues with over 1,700 pages, 1,600 articles and 2,400 images. Has a comprehensive index with how-to guide so you can search for any topic or detail in any of the 101 issues. Bonus on this CD: Steven Nikkila's Daydream Screen Saver, 74 of his most vivid works from gardens and nature.

1 CD in jewel case, Windows- and Mac compatible. \$20.00

***Janet & Steven's complete digital library New for 2011***

Set of two CDs: *Asking About Asters* and *Potting Up Perennials*. \$30.00



***Janet and Steven give you: Trees\****

A choice collection of Janet and Steven's advice for tree selection, planting and care. Each article made its debut in *Michigan Gardener* magazine and has been on hold since, awaiting completion of its fellows until this comprehensive compilation became possible. Topics include: Selecting trees; fall color; what's happening to ash trees; replacing a big tree; descriptions, lists and photos of great trees; why starting small is a good idea when planting; planting how-to, why's and why not's; staking, watering and fertilizing; mulching; rescuing a tree from the lawn; preventing construction damage; pruning to keep trees and shrubs small; removing suckers; detecting girdling roots; and dealing with maple tar spot and lecanium scale.

10" x 13" magazine, 48 pages. Color illustrations. \$12.00

***Janet and Steven give you: Landscape Ideas\****

Janet and Steven's favorite articles on landscape design and renovation: Designing with foliage color; covering up after the bulb season; doubling up perennials for 3-season color; shady solutions; using usual plants in unusual ways; designing hypo-allergenic gardens; Murphy's Laws applied to gardens; renovation how-to; fragrant plants and designs; attracting wildlife; rockwork; invasive plants; discovering a site's hidden assets; using herbs in a landscape; and how to cheat to improve a garden quickly. These articles appeared first in *Michigan Gardener* magazine individually between 1999 and 2011. Now they're collected in this set for your design library.

10" x 13" magazine, 48 pp. Color Ill.'s. \$12.00



***Janet and Steven give you: Garden Care\****

Vital how-to for tending a garden, from Janet and Steven's favorite articles on: bed preparation; soil testing; making a weed-free bed; spring start-up; improving hard-packed soil; fertilizing; watering; cutting back and deadheading; repairing irrigation; drought-tolerant plants; sharpening tools; tweaking in summer; staking; and the art of fall garden clean up. Items in this collection were selected from among Janet and Steven's ten years of *Michigan Gardener* articles. Each made its debut in that magazine, waited for its companion pieces and now they all join your library in this more durable and comprehensive form.

10" x 13" magazine, 48 pages. Color illustrations. \$12.00

***Janet and Steven give you: Trees, Landscape Ideas and Garden Care \****

Set of three 10" x 13" magazines, 48 pages each. \$30.00



**\*For a look inside, email [JMaxGarden@aol.com](mailto:JMaxGarden@aol.com) with the subject line "Magazine peek."**

Please print, complete and mail this order form with your check to purchase any of our CDs, journals, books or discount sets:

Your name: \_\_\_\_\_

Mailing address \_\_\_\_\_

Email or phone where we may reach you if there are questions: \_\_\_\_\_

Special instructions (re: autograph you would like or delivery to different locations): \_\_\_\_\_

**CDs**

*Asking About Asters* Special Edition 6-book CD ..... qty. \_\_\_\_\_ @ \$20.00 ea. ....=\$ \_\_\_\_\_

*Potting Up Perennials* CD, all of *What's Coming Up*  
from 2009-2011, with Daydream screen saver..... qty. \_\_\_\_\_ @ \$20.00 ea. ....=\$ \_\_\_\_\_

**Books**

*Designing Your Gardens and Landscapes* ..... qty. \_\_\_\_\_ @ \$19.00 each ...=\$ \_\_\_\_\_

*Caring for Perennials* ..... qty. \_\_\_\_\_ @ \$20.00 each ...=\$ \_\_\_\_\_

**Magazines:** 48-pages of our articles on one topic; full color, oversized pages, soft cover

*Janet and Steven give you: Trees* ..... qty. \_\_\_\_\_ @ \$12.00 each ...=\$ \_\_\_\_\_

*Janet and Steven give you: Landscape Ideas* ..... qty. \_\_\_\_\_ @ \$12.00 each ...=\$ \_\_\_\_\_

*Janet and Steven give you: Garden Care* ..... qty. \_\_\_\_\_ @ \$12.00 each ...=\$ \_\_\_\_\_

**Special discount sets:** (save up to \$6 over individual prices)

*Trees, Landscape Ideas and Garden Care* ..... qty. \_\_\_\_\_ set @ \$30.00 ..... = \_\_\_\_\_

*Asking About Asters* CD and *Potting Up Perennials* CD ..... qty. \_\_\_\_\_ set @ \$30.00 ..... = \_\_\_\_\_

**Still FREE:**

Our *What's Coming Up* e-newsletter.

Pages and pages of timely garden how-to every week!



Email JMaxGarden@aol.com to join the mailing list.

**Total your order**

A. Total of items ordered above..... \$ \_\_\_\_\_

B. *Michigan residents must add 6% sales tax* ..... \$ \_\_\_\_\_

C. Shipping and handling (See below)..... \$ \_\_\_\_\_

D. Grand total A+B+C..... **Total enclosed \$** \_\_\_\_\_

Make foreign checks "payable in U.S. funds"

Make checks payable to Janet Macunovich.

Mail to 120 Lorberta, Waterford, MI 48328-3041

**Shipping and handling**

1-3 CDs \$4

1-3 Magazines or 1 set of 3 \$6

Each book \$4

Larger orders: Inquire via email to JMaxGarden@aol.com

Outside U.S.: Compute shipping as above, then multiply x 1.5

Satisfaction guaranteed: If you are not thoroughly delighted, you may return your order within thirty days of receipt for a full refund of your purchase price minus any shipping and handling.

We accept orders by mail with check or money order, and in-person orders any time you come to one of our educational events or hands-on gardening session.