

Garden NOTES

NORTHWEST HORTICULTURAL SOCIETY

SUMMER 1999



PHOTO: CLYNNIE HARRISON

AUG 16 1999
University of Washington
CENTER FOR URBAN HORTICULTURE
ELISABETH C. MILLER LIBRARY
BOX 354115
Seattle, Washington 98195-4115

Pond in the garden of Judy Mahoney and Phil Wood

CREATING SMALLER WATER FEATURES FOR THE GARDEN

BY PHIL WOOD

Water brings life to the garden. The sound of a fountain, the sky's reflection in a pool, the touch of cool water on the hand: even the simplest water features awaken our senses. They can range in scale from large ponds to tiny pools in a pot.

Larger ponds are best left to the professional pond installer. Smaller pools are within the reach of all.

The simplest water feature is a ceramic pot. Choose one glazed inside and out for water-tightness. Unglazed pots can be sealed with masonry sealant, or with silicone caulk diluted with paint thinner. I have a glazed ceramic pot 26 inches wide by

15 inches tall in a corner of my garden, holding a *Thalia dealbeata*. In the winter, I drain the pot and store it in an unheated space, and cut back the thalia and keep it moist in a frost-free area.

▶▶▶

WATER FEATURES continued from page 1

A larger scale project is a raised pool built of wood with a liner. Mine is five feet square, made of 4x6 timbers treated for ground contact. After the liner is put in, a 2x12 board cap covers the top edge to make a seating area around the pool. I added a grid of 2x2s for safety when our daughter came into our life.

An in-ground pool can be as simple as a bucket. Dig a hole, put in a plastic container of the desired size, and edge the top with bricks or stone. I have seen children's wading pools used to make bog gardens.

The fun starts when we talk about fountains and creating movement in a water feature. Ideas are limitless. I saw a watering can as a fountain in a garden and added one to mine. I found a bottomless antique French watering can (\$40 dollars, thank you very much) and hooked up a hose to a pump that sits in the bottom of the pool and runs out the spout. The same pump also provides water to a terra-cotta pot with a copper pipe in the side that spills water into the pond. Fountains in the form of frogs, fish and other figures can be found at garden supply stores. A simple jet of water coming out of the pool can be very effective too. Another benefit of pumps is that they can add filtration. A filter can be added at the intake end, which can help keep the water clear. A pump requires an electrical connection. Make friends with an electrician for the work.

Plants are the finishing touches. Plants that can grow in shallow water are called emergents. They are simply set into the pool already potted up, with 1/2 inch of gravel on the pot's top to keep the soil in the pot. Rest the pot on bricks if necessary to raise its level. I like the oval leaves of *Thalia dealbeata*, about 4 feet tall. Irises suitable for water culture are many. *Iris pseudoacorus* 'Variegata' and *Iris laevigata* 'Variegata' are variegated forms that add sparkle to a planting. Calla lilies, *Zantedeschia aethiopica*, will grow in a few inches of water, to give both good flowers and exotic leaf texture. *Osmunda regalis* is a striking fern that likes spending the summer in the pool. I have seen lotus (*Nelumbo nucifera*) growing in pots in China. Dwarf forms are suitable for pot culture, as are dwarf forms of waterlilies (*Nymphaea*).



Sometimes it takes an artist to show us how to use a few simple components to create a focal point in the garden. Little and Lewis used their famous Mexican blue wash to enhance this simple pot and added a few floats to complement the reflection of the sky in the water. Their studio garden, filled with sculpture and easy-to-maintain water features, will be open to the public on Saturday, August 14, from 10 a.m. to 4 p.m. Call (206)842-8327 for directions.

For information and sources of water garden materials, there are two invaluable establishments, **Oasis Water Gardens**, near the Costco south of downtown Seattle, and **Moorehaven**, off the Mukilteo Speedway. Both stores have knowledgeable staff and will help with liners, pumps, filters and plant selection. Nurseries and garden centers are good sources for pots and fountain supplies.

No garden is complete without some sort of water garden. They add new dimension gardening, and open up a realm of horticultural possibilities. 🌿

Phil Wood is the owner of Phil Wood Garden Design, specializing in the design and construction of residential gardens. Phil is a former board member of the Northwest Horticultural Society, and serves currently on the board of the Seattle Chinese Garden Society. Phil can be reached at (206) 632-6735, email at philwood@philwoodgardens.com or visit his web page at www.philwoodgardens.com

(Phil will kick off the NHS 2000 lecture series on Wednesday, January 12, 2000, at 7:30 p.m. The title of the talk will be: "Walls, Hedges and Fences: Designing Edges in the Garden". Phil will show examples from his recent work, and from gardens around the world.)



PHOTO BY STEPHEN NYIKOS

Shadow Gardens Nursery, Indiana

DOWN AND DIRTY WITH HOSTA

The Basics for Growing the Best Hosta in the Neighborhood

BY STEPHEN NYIKOS

BEFORE WE INSTRUCT YOU on the proper position, focal point and which ancient text to recite in order to channel the spirits of the earth, let's just look at the dirt. Hosta are not snobbish about culture, but it does affect their health, appearance and performance in the garden.

Culture refers to the conditions in which one grows plants. It includes factors such as soil texture, light, exposure, moisture and nutrition. Culture can be affected by how we work in the garden as well as what is done to the garden. For hostas, good culture is basic and essential.

There is a small school of gardeners

who advocate double digging when preparing beds for planting; this is not necessary when preparing to plant hosta because their roots do not go two spade depths down. The soil does need to be prepared; the plants need air (oxygen) in order to respire—process sugars, exchange gases and grow. If improved drainage is the goal, adding drainage tiles is a far better solution than double digging. In my garden, we use several simple techniques to prepare our soil and continue to care for permanent plantings: sheet composting, soil amending, top dressing and mulching. The following is an overview of what we do.

PREPARING THE PLANTING SITE

How Big is Big Enough?

We recommend improving the area of the ultimate canopy plus about $\frac{1}{3}$. This area is critical because the roots are most likely to grow into this canopy + $\frac{1}{3}$ area in search of moisture and nutrients. It takes plants a few seasons to grow that far, so the area can be amended (top dressed) later as well. For the largest hostas—like our seven-foot 'Sum and Substance'—the canopy + $\frac{1}{3}$ rule might be excessive for most gardeners. So when planting a hosta with an ultimate size of over 5 feet in >>>

diameter, preparing a two-foot planting area would suffice; apply top dressing as the plant increases in size to encourage continuous healthy growth.

Adding organic matter will improve the tilth and health of any soil and creates the building blocks from whence Hostazilla will grow. Why? In clay soils, the organic material will improve drainage, allow better gas exchange and lighten the soil. In sandy soils, it will add binding and moisture retention as well as nutrient centers that are lacking in these soils.

SHEET COMPOSTING

This process takes about one growing season and is best done in advance for planned beds.

Simple and effective, sheet composting is literally a sheet (layer) of amendments and organic matter placed on top of the soil and turned in with a rototiller, disc or plow. The organic matter can be raw or composted leaves, weed-free scraps, grass clippings or other materials. We mainly use shredded leaves and sawdust for the bulk material; these components are readily available. As the word "composting" in the phrase implies, the sheet of material should contain all the ingredients of a compost pile including a source of nitrogen such as green materials (leaves, grass clippings, etc.), organic fertilizers (bloodmeal or cottonseed meal) or chemical fertilizers.

After building the layer of amendments, turn it under and allow it to compost in the soil for a few days or a couple of weeks before turning. Keep it moist, like a compost pile, and continue to turn the soil occasionally until it is difficult to tell what you've added to build the compost. This is how regular composting is done; and the mixing and turning produces a substance whose original components are mostly unrecog-



PHOTO BY DIANE LAIRD

Hostas in containers are nearly at eye level when guests relax in the garden of Steve Antonow

nizable. Between tillings we also plant green manure crops for added organic content and to prevent erosion.

AMENDING THE SOIL WITH FINISHED COMPOST AND FERTILIZERS

This is a quick-fix preparation for immediate planting

Suitable for large, small and spot applications, amending is similar to sheet composting. In this case, the amendments are ready to go. Instead of leaves or raw material, **we use finished compost or aged sawdust** which are the bulky organic material. We also add synthetic or naturally-occurring ingredients to boost soil fertility as indicated by a laboratory test. (A lab test may not be practical for a small garden.)

After all of the amendments are added and mixed in, the planting site is ready to go immediately. We prefer to moisten the soil prior to planting. (If you can squeeze a handful of soil into a ball and crumble the ball with the push of a finger, your soil has the right moisture content and is ready to work. If the ball doesn't crumble, then moisture content is too high and you need to wait.)

AMENDING BY TOP DRESSING

To improve the tilth of the soil around existing plantings

To rejuvenate existing plantings, pull

back the mulch and place amendments and fertilizers on top of the soil and mix it in lightly. Take care not to dig deeply and damage the roots; a slight mix is just fine. Then spread the mulch back over the newly amended soil. **In larger hosta beds,** the top dressing can be placed on top of the mulch and mixed lightly into the mulch itself. Hostas grow so densely that mixing the mulch into the soil under the canopy will not significantly increase the likelihood of weeds in that area.

The nutrients for good color and vigor can be found in additional amendments; but most gardeners may grow acceptable plants without them. However, **greensand and alfalfa meal seem to darken leaf color and improve stem and root development. If you like those near-black hosta, greensand is a must.** Hosta plants require a steady supply of nitrogen but high amounts of nitrogen will actually do damage. Add supplemental nitrogen in small amounts either by foliar or granular fertilizers.

MULCH

Mulch is very important for hostas. We apply it up to 5 inches thick in our large cultivar beds. These plants have a canopy of 5 or more feet in diameter. In the immediate root zone (canopy) the mulch is around 2 to 3 inches deep. The area between the larger plants has heavier mulch because we don't want to weed endlessly. A stirrup hoe is a great weeding tool for these deeply-mulched beds.

Mulch helps regulate soil temperature and it lessens the amount of soil (and soil-born pathogens) which splash on the leaves. Do not place mulch against the crown of the plant; this can cause poor air circulation in the crown area and increase the possibility

of fungus in the humid parts of the summer (summer blight).


Reapply mulch when the soil is more evident than the mulch—for warmer climes, this will be about every other year. In Indiana, I apply a new layer every 3 years or so; at the same time, I amend the soil and do a lot of planting and shuffling of plants.

HOSTAS IN CONTAINERS

Growing hostas in containers is very rewarding as well. They need the same type of care as when grown in the ground, but need it more often. Frequent waterings and more frequent feedings are important to keep the plants hydrated and to replace nutrients which are typically washed through the containers with the moisture runoff.

We grow our potted plants above ground in composted sawdust, and we always water the plants with an extremely dilute fertilizer or compost tea. Every two weeks they get a dose of half strength liquid fertilizer until mid season and then we cut back on the strength of the fertilizer for the remainder of the season. If there is an early hard freeze, fibrous roots and soft tissues retaining too much moisture can die—the cells literally explode.



After the gardener's toil, steady moisture, light feedings and top dressings will be all the hosta need to be the finest, fullest foliage in your garden and the envy of the neighborhood. 

Stephen Nyikos is a Master Gardener, an information designer—"I package words and concepts into niches for the target audience..."—and owner/operator of Shadow Gardens Nursery in Northern Indiana. He can be contacted via e-mail at hostaguy@kconline.com

HOT HOSTA NEWS FROM NAYLOR CREEK

BY JACK HIRSCH AND GARY LINDHEIMER

Hostaholics Gather: We returned a couple weeks ago from Ann Arbor, Michigan, where over 500 hostaholics met for a week at the annual convention--warm days of garden tours, lots of vendors (we took a truckload of special stuff back), cut-leaf show and an auction where this year the highest price paid for a plant was only \$1,400 (last year one went for \$5,000).

It's time when one considers that maybe this could really be a sickness and help should be sought--all the hotel rooms have many hostas in them (purchases from the vendors and nurseries and trades that go on in back rooms). Rumors often start as to who might be fooling around with whom and then it comes out that the suspect parties were just showing each other their hosta--now that's really okay.

Hot Hosta: Some new plants for this year that we feel have good garden worthiness and are quite attractive are:

Hosta 'Loyalist' this one is the reverse of *H. 'Patriot'* and is a fast grower with good substance, nice white center with dark green margin and lavender flowers.


Hosta 'Twilight' new hosta from Holland with a thick and shiny leaf that is dark green and has a nice wide yellow margin--this also grows well and we think it will become a classic.

Hosta 'Little Sunspot' this one comes from Briggs Nursery and looks like a little *H. 'Great Expectations'* by the time it colors up for the season, nice yellow-centered leaf with a wide green margin. It has light purple flowers and is a vigorous grower.

Hosta 'Sum it Up' is a sport of *H. 'Sum and Substance'* and has a medium to dark green leaf with a yellow edge. We think it will grow larger than its parent and have all the same good attributes such as being able to take a lot of sun and having great slug resistance.

Hosta 'Kiwi Gold Rush' and H. 'Kiwi Treasure Trove' are two of the new introductions we've brought in from New Zealand. There is a whole 'Kiwi' series from a group of hybridizers in that country that will become available over the next 3-4 years. *H. 'Kiwi Goldrush'* is a nice gold plant which becomes a very rich color as the season progresses and the veins turn a nice lime green and the plant is crowned with light lavender flowers. *H. 'Kiwi Treasure Trove'* is a large plant with a bright green leaf that has a wide variable white margin; this one forms a huge mound.

Even though these plants are new to the marketplace, none of them costs an arm and a leg—they range in price from \$14 to \$30.

Hosta of the Year: *Hosta 'Paul's Glory'* is the 1999 Hosta of the Year as chosen by the American Hosta Growers Association. In 2000 it will be *H. 'Sagae'* (formerly known as *H. fluctuans 'Variegated'*). Both of these plants are super for the garden and do very well here in the Northwest. 

Naylor Creek Nursery is at 2610 West Valley Road, Chimacum WA 98325. Phone (360) 732-4983 for driving directions and nursery hours or visit their web site for directions at: <http://www.naylorcreek.com/> The Boys From Naylor Creek are among our favorite NHS Fall Plant Sale vendors, so look for them on September 10 and 11. In the meantime, see a photo-filled rave review of their nursery at: http://suite101.com/article.cfm/shade_gardening/15365

GUIDE TO LOCATING HOSTAS BY FOLIAGE OR FLOWER

Reprinted with permission from

PLANT DELIGHTS NURSERY, INC.

The size refers to the spread of the plant ; i.e., how much room it will take up in our garden when mature.

Small & Miniature: between 0 and 12 inches, **Medium:** 12 to 24 inches, **Large:** 24 to 48 inches and **Extra large:** 4+ feet

Many of you may remember Tony Avent, Plant Delights Nursery, from our NHS lecture series — he was one of our most popular speakers. We'd like to thank Tony for letting us reproduce this reference table for use by the NHS membership. You may contact Plant Delights Nursery, Inc. by Phone: (919) 772-4794 or Email: office@plantdel.com or visit their web site at <http://www.plantdel.com/>

GREEN FOLIAGE

SMALL	MEDIUM	LARGE	EXTRA LARGE
Tiny Tears Uzo No Mai	Barney Fife Fourth of July Harvest Delight Holly's Dazzler <i>hypoleuca</i> Maekawa Obsession Permanent Wave	Phantom <i>plantaginea</i> <i>plantaginea</i> Aphrodite Sweet Bo Peep Taffeta Takahashii Goshan Tardiflora	Donahue's Piecrust <i>fluctuans</i> Potomac Pride Royal Standard Komodo Dragon

BLUE FOLIAGE

SMALL	MEDIUM	LARGE	EXTRA LARGE
Baby Bunting Blue Danube Blue Moon Dorset Blue Hadspen Hawk Popo	Abiqua Drinking Gourd Blue Wedgewood Fragrant Blue Hadspen Blue	Osprey Pearl Lake Salute Valentine Lace	Azure Snow Blue Belle Elvis Lives Halcyon Krossa Regal Lakeport Blue Sea Sapphire <i>sieboldiana</i> Elegans Tenryu Blue Angel Blue Umbrellas

GOLD FOLIAGE

SMALL	MEDIUM	LARGE	EXTRA LARGE
Cheatin Heart <i>Iongipes</i> Golden Dwarf Vanilla Cream	Gold Edger Golden Empress Golden Scepter Golden Teacup King Tut	Little Aurora Little Black Scape <i>Iongipes</i> Aurea Sweet Sunshine Sweet Tater Pie	Aztec Treasure Gold Regal Lemon Twist <i>montana</i> Mountain Sunrise Squash Casserole Sun Power Choo Choo Train Sum & Substance

GOLD BACKGROUND/GREEN OR BLUE EDGE

SMALL	MEDIUM	LARGE	EXTRA LARGE
Twist of Lime	Brenda's Beauty Cadillac Emerald Tiara Fan Dance Grand Tiara June	Kabitan Lucy Vitols Paintbrush PeeDee Gold Flash Tattoo PPAF	Gold Standard Guacamole Hoosier Harmony Inniswood Kathryn Lewis Lunar Orbit Midwest Magic <i>montana</i> Kinkaku <i>montana</i> On Stage Paradigm Paul's Glory Radiant Edger Rascal September Sun Wedgewood Gold

GOLD BACKGROUND/WHITE EDGE

SMALL	MEDIUM	LARGE	EXTRA LARGE
	Delta Dawn Sea Dream	Shade Fanfare	Saint Elmo's Fire

GREEN BACKGROUND/GOLD EDGE

SMALL	MEDIUM	LARGE	EXTRA LARGE
Duchess Gajin Kifukurin Ko Mame Lemon Delight Stiletto	Bridgeville Crepe Suzette Don Stevens Heliarc <i>kikutii</i> Kifukurin <i>plantaginea</i> Ming Treasure	Queen Josephine Verna Jean Warwick Curtsey	Abba Dabba Do Abiqua Moonbeam Bold Edger Fragrant Bouquet Gala Showboat Twilight PPAF
			Lady Isobel Barnett

GREEN BACKGROUND/WHITE EDGE

SMALL	MEDIUM	LARGE	EXTRA LARGE
Cherub	Citation Cupid's Dart Fair Maiden Ginko Craig Iron Gate Delight Leola Fraim	So Sweet Soft Shoulders Tambourine Torch Light Van Wade	Angel Feathers Emily Dickinson Francee Mount Hope Patriot PeeDee Laughing River Rhapsody Summer Fragrance Yellow River
			Antioch Frosted Jade <i>montana</i> Mountain Snow

BLUE BACKGROUND/WHITE OR GOLD EDGE

SMALL	MEDIUM	LARGE	EXTRA LARGE
Peace	Abby Aristocrat PPAF Blue Shadows Chantilly Lace Formal Attire	Gay Blade Moon River Sagae Veronica Lake Warwick Edge	Frances Williams Julia Mildred Seaver Northern Exposure Regal Splendor Robert Frost Wolverine

WHITE CENTER/GREEN OR BLUE EDGE

SMALL	MEDIUM	LARGE	EXTRA LARGE
Island Charm Masquerade Medusa Pandora's Box Warwick Delight	Cherry Berry Embroidery Fire and Ice Loyalist Mary Marie Ann	Sea Thunder Striptease White Christmas Summer Music	Great Expectations Night Before Christmas

FROSTED WHITE FOLIAGE

SMALL	MEDIUM	LARGE	EXTRA LARGE
Out House Delight	Spilt Milk	White Wall Tire	

FRAGRANT FLOWERS-WHITE

FRAGRANT FLOWERS-VIOLET

Fragrant Bouquet Guacamole Hoosier Harmony <i>plantaginea</i> <i>plantaginea</i> Aphrodite	<i>plantaginea</i> Ming Treasure Royal Standard So Sweet Sweet Sunshine Sweetie	Emily Dickinson Fragrant Blue Honeybells Invincible	Iron Gate Delight Sweet Bo Peep
--	---	--	------------------------------------

LIBRARY AUCTION: GREAT PARTY! BIG SUCCESS!!

BY DOUGLAS C. BAYLEY

THE FOURTH NHS GARDEN PARTY/AUCTION for the benefit of the Elisabeth C. Miller Library was a big success. The event was sold out a week ahead of time. Guests mingled with wonderful food from That Added Touch and music from the Dave Nocet Trio. Competition was intense on many items, and they quickly reached the maximum bid. Jerry Toner did a great job as the auctioneer. The bidding was heated, in one case reaching ten times the stated value.

This party has become a fixture of the spring season in the horticultural world. The time seems to work, being the first Sunday in May, after Opening Day, people are in town and ready to have a party. NHS members, friends, and their guests eagerly sought plants and garden-related items from the best Northwest sources.

Susie Marglin and Meg Ryan did wonderful arrangements with the flowers. Gillian Mathews, Ann LeVasseur and Peg Pearson arranged the decorations and made sure all the auction items were set to their best advantage. Madeleine Wilde, Susan Adkins, Karin Kravitz and Joanne White gathered the all-important detailed descriptions and

wrote the catalog. Colin Cary and volunteers from Seafirst handled the financial transactions. And the masterful

Ferguson, and Brian Thompson — each made an enormous contribution. Casey Kelbaugh photographed the event, and

a collage will be made to record the festivities and hung in the Library.

This event is labor intensive but achieves its goal of raising funds for the operation of the Elisabeth C. Miller Horticultural Library. The auction raised more than \$20,000 and brought in another \$7,000 in matching funds from the Miller Charitable Trust. Altogether, the NHS Endowment for the Library is over \$100,000 and the Fund is already turning over \$5,000 annually to the Library.

Thanks to all of the volunteers and friends who made this

happen...and give some thought to how it can be made even better next year. My special thanks to Pat Sheppard who took committee meeting minutes before the auction and kept us all on track. It was a special pleasure and privilege to chair this event. 🌿

Doug Bayley is a Seattle landscape designer, a garden conservation consultant, and the chair of the NHS Library Committee. He may be reached by email at Dougbayley@aol.com



PHOTO BY CASEY KELBAUGH

Arthur Lee Jacobson and Nell Scott at the auction

mind of Karin Kravitz was working non-stop behind the scenes and way beyond her job description as NHS Office Manager.

The procurement team, including Madeleine Wilde, Diane Laird, Susie Marglin, Joanne White and Dan Zatz found the best of all things and events to be auctioned. The real joy is all of the friends of NHS and the Miller Library who supported this event with their gifts and generosity. Many thanks to the Library staff — Val Easton, Martha

GREEN FLOWERS

BY ERNIE WASSON

GREEN FLOWERS were amongst my mother's all-time favorites. I think she liked them because they are such subtle additions to the garden spectrum and flower bouquets. One can truly appreciate them only when one takes the time to stop and really look up close and personally at their green "wings." They don't depend on showy color to draw attention; rather you must focus on their shapes, their personalities, and the glowing green hues of their parts. Green works with almost any other flower color. And it does so perhaps because most flowers rise above green foliage, and our eyes have become accustomed to such color combinations. Green blossoms remind us that flowers, no matter what their color or shape, are nothing more than modified leaves trying to attract insects to their seed making parts.

While living back east I created a garden of greens, blues and silvers: green zinnias, bells of Ireland, blue salvias and dusty millers were parts of the palette of plants I used to create a cooler sense of place. The cooler colors helped to refresh east coast garden visitors on hot, muggy summer days. Several beds in the garden featured a riot of bright and vibrantly colored flowers; but one's eye and mind could always rest while walking through all the green blooming and more restful colors that were a part of this landscape.

Next time you are strolling through a garden with green flowers make a point to slow down, take a deep breath, and really observe up-close the wonderful green hues. We all need a way to slow down and enjoy our gardens. Learning to appreciate green flowers is a simple exercise in observation and patience that can give us a moment of quiet and peace in our home landscapes.

The plants in the following list have a significant green hue in all or part of their visible flower parts. Some are commonly available; others you will have to hunt for at your local nursery, perhaps find at a local college or botanic garden plant sale, or read about in your growing stack of plant and seed catalogs. If you have any favorite green flowers that are not in the following list please email me with your suggestions. I would love to add some new green creatures to my list of favorites (* indicates marginally hardy in the Seattle area and may need special handling in winter):

Alchemilla mollis, Lady's Mantle
Amaranthus caudatus 'Viridis', green thumb amaranth
Anethum graveolens (synonym *A. graveolens*), dill
Aquilegia viridiflora, columbine
Aquilegia vulgaris 'Irish Elegance', columbine
Brassica oleracea, romanesco broccoli

Bupleurum rotundifolium, thore-wax
 **Crotalaria agatiflora*, canary-bird bush
Deschampsia caespitosa, tufted hair-grass
Digitalis viridiflora, foxglove
Eryngium spp. A large number of sea hollies have green flowers.
 Some of my favorites are:
E. agavifolium (usually sold as *E. bromeliifolium*),
E. bourgatii, *E. palmatum* and *E. X tripartitum*
Eucomis bicolor, pineapple flower
Euphorbia spp. A large number of euphorbias have green flowers.
 Some of my favorites are:
E. characias ssp. *wulfenii*, *E. corallioides*, *E. polychroma*,
E. X martinii, and *Euphorbia seguieriana* ssp. *niciciana*
Galtonia viridiflora
 **Garrya elliptica*, coast silktassel
 **Gladiolus* 'Green Meadows'
Helleborus argutifolius
Helleborus foetidus
Hemerocallis 'Green Puff'
Hermodactylus tuberosus, snakes-head iris
Heuchera cylindrica 'Greenfinch'
Humulus lupulus, common hop
Iris 'Limelighter'
 **Ixia viridiflora*, green *Ixia*
Kniphofia 'Green Jade'
 **Lachenalia viridiflora*, cape cowslip
 **Lavandula viridis*, lavender
Moluccella laevis, bells of Ireland
Narcissus 'St. Patrick's Day'
Nicotiana langsdorfii, flowering tobacco
Nicotiana 'Lime Green'
Pennisetum alopecuroides 'Hamelin', fountain grass
 **Puya alpestris*, molina
 **Puya berteroniana*, molina
Reseda odorata, mignonette
Ribes glutinosum 'Inverness White', flowering currant
Rosa chinensis 'Viridiflora', green rose
Rosa 'Greensleeves', greensleeves rose
Rudbeckia 'Green Wizard'
Rudbeckia 'Irish Eyes', gloriosa daisy
Stipa tenuissima, Mexican feather grass
Tulipa 'Greenland', viridiflora tulip
 **Zantedeschia* 'Green Goddess', calla lily
Zigadenus elegans, camas
Zigadenus glaucus, camas
Zinnia elegans 'Green Envy'

Ernie Wasson has gardened on both coasts and is an alumnus of the Longwood Graduate Program. Co-chief editor of the recently published **Botanica, The Illustrated A-Z of Over 10,000 Garden Plants And How To Cultivate Them**, Random House, 1997, he is currently the garden manager at the Cabrillo College Horticultural Department in Aptos, California. You can email him at sluggo@sirius.com—especially if you have green flowers to add to his list.

NHS CALENDAR OF EVENTS – A

DATE, DAY & TIME	EVENT NAME	FEATURED SPEAKER	TYPE OF EVENT
August 10 (Tues) 1:30 – 2:30	Shade Gardening	Richard Hartlage , Director/Curator of the Miller Garden	In-Garden Class
August 12 (Thurs) 9:30 – 11:30 a.m.	Summer Pruning	Bess Bronstein , Master Gardener; Instructor at Edmonds C.C.	In-Garden Class
August 14 (Sat) 10:00 – 12 Noon	Planting Design	Linda Cochran , Owner of Froggy Bottom Nursery	In-Garden Class
September 8 (Wed) 10:00 – 12:00 Noon	Planting Design for Fall & Winter	Jim Fox , Wells Medina Nursery	In-Nursery Class
September 8 (Wed) 7 pm Reception 7:30 Begin	Nature Abhors a Garden	Peter Del Tredici , Curator of the Arnold Arboretum, Boston	Slides & Lecture
September 10 & 11 Friday, 3:00 – 7:00 Saturday, 9:00 - 4:00	Annual Fall Plant Sale Second Day	 <h2 style="margin: 0;">Fall Plant Sale</h2> <p style="margin: 0;">(Friday Afternoon & All Day Saturday) Volunteers call Karin Kravitz at (206)780-8172 or email nhsemail@compuserve.com</p>	
September 18 Saturday 8:30 – 4:30	Treasures of the Woodland	John Bond, Dan Hinkley, Cole Burrell, Judy Glattstein	Symposium & Lunch
October 13 (Wed) 7 pm Reception 7:30 Begin	The Best of the Best	Richard Hawke , Coordinator of Plant Evaluation at the Chicago Botanical Garden	Slides & Lecture
October 24 (Sun) 2:00 – 4:30 p.m.	Tree Tour	Arthur Lee Jacobson , author, <i>North American Landscape Trees</i>	Walking Tour Class
October 27 (Wed) 7:30 – 9:30 p.m.	Gardening on the World Wide Web	Brian Thompson , Systems/Tech. Services Librarian; Miller Library	Class
November 2 (Tues) 1:30 – 3:30 p.m.	Conifers	Richard Hartlage , Director/Curator, Miller Botanical Garden	In-Garden Class
November 9 (Tues) 10:00 – 12 Noon	Fall Focus	Bob Lilly , Co-curator, NPA Border Bellevue Botanical Garden	In-Garden Class
November 10 (Wed) 7 pm Reception 7:30 Begin	Creating Great Rooms	Keith Geller , Seattle landscape architect	Slides & Lecture

JUST THROUGH NOVEMBER 1999

DESCRIPTION	COST: MEMBER / NON	LOCATION
Garden demonstration: how to design, install and maintain a shade garden that will enjoy any sunny border.	\$20/\$30 15 people	Elisabeth Miller Botanical Garden* (206) 527-1794
Bronstein will share her art and skill in a pruning demonstration of plants that benefit most from summer pruning.	\$20/\$30 15 people	Elisabeth Miller Botanical Garden* (206) 527-1794
Cochran will discuss the plants and the design inspirations that created her dramatic, engaging, tropical-look garden.	\$20/\$30 15 people	Cochran Garden , Bainbridge Island (206) 527-1794
Fox will show how to select and combine plants to create an exciting fall garden.	\$20/\$30 15 people	Wells-Medina Nursery Bellevue (206) 527-1794
Realistic approach to gardening as opposed to that which requires either unlimited time or money. Tips on how to reduce maintenance and improve plant performance in the garden.	\$5 / \$10	NHS Hall (206) 527-1794
Some of the Puget Sound's best growers bring fabulous plants to the sale and will be on hand to advise on the selection and care of their plants: hostas, hydrangeas, herbs, fuchsias, shrubs, grasses and a wide range of flowering perennials.	Free	Center for Urban Horticulture (206) 527-1794
Woodland garden experts from the United Kingdom and the US will share with us their plant and design expertise on how to create our own enchanted woodland gardens.	\$65/ \$85	Museum of History & Industry (206) 527-1794
Richard Hawke will share his expertise on which plant is the best in the genus, whether your favorite genus is the <i>Monarda</i> , <i>Phlox</i> , or <i>Goldenrod</i> .	\$5 / \$10	NHS Hall (206) 527-1794
Laurie Lee Jacobson will conduct a walking tour of the trees on Capitol Hill beginning at Volunteer Park.	\$25/\$35 15 people	Meet at Asian Art Museum (206) 527-1794
Introduction to navigating the Internet and finding the most useful www garden resources of interest to the home gardener	\$20/\$30 20 people	Isaacson Classroom, CUH (206) 527-1794
Richard Hartlage will show the Miller collection of mature dwarf conifers and demonstrate how to use them in your garden.	\$20/\$30 15 people	Elisabeth Miller Botanical Garden* (206) 527-1794
Lilly will show how fall focus has been used in the Border and give maintenance tips for the fall season.	\$20/\$30 15 people	Bellevue Botanical Garden (206) 527-1794
Even in our small urban gardens, we can have wonderful retreats by creating connecting garden rooms.	\$5 / \$10	NHS Hall (206) 527-1794

* All proceeds from classes given in the Elisabeth C. Miller Botanical Garden benefit NHS and not the Miller Garden

ROSE TIP: LISTERINE® FOR KEEPING CUT ROSES LOOKING FRESH

BY MARK WHITELAW

**ROSE SCIENTISTS ARE NOT CERTAIN WHY OR EVEN HOW IT WORKS.
ALL THEY KNOW IS THAT IT DOES WORK.**

To preserve the fresh cut appearance of your roses, harvest them early in the morning, before the blooms are fully "blown" (fully opened). Bring them into the house, and place the cut ends into a bowl of water. Then, with a sharp pair of scissors, re-cut the end of the rose under water and at a 45 degree angle. This second cut should be made about 1 in. (2.5 cm) above the original cut. Next, slowly retract the stem from the water. A small water droplet should remain on the cut end of the rose. Then insert the cut end into a bottle of Listerine® antiseptic mouthwash, and leave it there for 30 seconds. Finally, remove the rose from the mouthwash and place it in a vase of fresh water.

Tests using these procedures have shown that the cut rose will look fresher and last as much as 30% longer than when using the same procedures without the mouthwash.

And one last note: Be certain to mark the bottle of mouthwash so you won't use it for personal hygiene. (A rose prickle stuck in your gums is no fun. Ouch!)

TESTING THE TIP

I'M FREQUENTLY CHALLENGED ON my above tip regarding Listerine®; the challenges arise periodically throughout rosedom.

First, let me state that my tip very specifically states that the Listerine® treatment will help the cut rose *look fresher and last as much as 30% longer than when using the same procedures without the mouthwash*. Please note the phrase "as much as."

The test to which the tip refers was done by yours truly after reading a statement in an article written in **The American Rose Society's American Rose** magazine in 1992. But lets begin at the beginning.

The use of Listerine® as a preservative for cut roses has been used for decades as a "secret ingredient" by floral arrangers and competitors who wished to keep their cut flowers fresh while transporting them for exhibitions.

In the **1991 American Rose Annual** article, "Growing Miniature Roses," Lionel and Laura Patenaude (whom I have met at every rose show since I've been competing and who have won almost every trophy available at one time or another) wrote, "As with most exhibitors, we have many beautiful blooms that will not keep until show time. We add a

tablespoon of Listerine® to a gallon of cold water. The roses are cut and immediately put into this mixture." (Ref: *1991 American Rose Annual*, ARS, Dec. 91, pg. 63.)

Dr. Jim Johnson, Director of the **Benz School of Floral Design at Texas A&M University**, demonstrated and recommended a "home remedy" for preserving flowers by conditioning the water used in floral arranging. The recommendation was for two ounces of Listerine® per gallon of water. This was reported initially in the Jan. 92 issue of *The American Rose* by Kathy Noble, from the South-Central District of the ARS. In Kathy's article, "Arrangement Fundamentals," she noted, "A Listerine® solution ... offers antibacterial action and a trace of nutrient value. It [the water solution] does need to be changed (with stems recut and container washed) every 3 - 5 days." (Ref: *The American Rose*, ARS, Jan. 92, pg. 21.)

Kathy again referred to Dr. Johnson's treatment in the Mar. 92 issue, and added, "By the way, only Listerine® or its generic equivalent (which some drug stores manufacture under their own label) has the correct formulation to be effective. No

other "mouthwash" will do!" (Ref: *The American Rose*, ARS, Mar. 92, pg. 24.)

In the article, "Please Don't Drink the Water," **former Chairman of the ARS Arrangements Judging Committee, and past Illinois-Indiana District Chairman of Arrangement Judges, Russell Anger of Indianapolis, IN suggests Listerine®** as one of three rose preservatives. Russell suggests a mixture of Listerine® at a rate of one tablespoon per quart of water. (Ref: *The American Rose*, ARS, Jul. 93, pg. 19)

Russell expanded his article in the **1994 American Rose Annual**, "Fixing the Water: The Use of Floral Preservatives," and again calls for the use of Listerine®, adding "It is better to use the original formula rather than the flavored kind." (Ref: *1994 American Rose Annual*, ARS, Dec. 1994, pp. 118-119.)

And again the subject of Listerine® came up in August, 1997, in Barbara Stauch's article "**Conditioning Cut Roses**" where she embellishes the formula by writing, "Satisfactory results [for conditioning roses] can also be obtained from both Listerine® and 7-UP®, added at about 1 tablespoon per gallon of water. Any homemade preservative should contain sugar, a bactericide and an acidifier." (Ref: *The American Rose*, ARS, Aug. 97, pg. 11.)

Never one to take anyone's word for anything, I decided to conduct my own research and testing—especially since I grow and test a lot of roses and from a variety of different classes.

On varying days during the spring, I selected two examples of each rose in my garden, each showing the same stage of opening and development. One rose was used as a "control;" the other was used in the Listerine® test. Both roses were selected the same morning, from the same shrub, and re-cut underwater using the same procedures. One rose (the control) was placed in a vase of fresh water only. The other was dipped into a straight Listerine® solution for 30 seconds (exactly), then placed in a second vase of fresh water. Side-by-side the roses remained on my countertop. *Invariably, the Listerine-treated rose remained fresher and lasted longer than the "control" rose.*

The rose showing the longest life was 'Chrysler Imperial' which lasted 10 days with the treatment, while the control lasted only seven. But most of the roses only lasted a day or two longer. In the case of many of my antique roses (many of which only last 3-4 days in the vase of plain water) the



Listerine® treatment extended their life to 4-6 days or roughly 30% longer. Those roses lasting the least amount of time were the Noisettes. (Please don't ask me why; I don't know the answer.)

In all, 73 different roses were tested using this procedure over the course of the early spring. Although these 73 are a mere fraction of the tens of thousands of roses available on the market today, I felt they were representative of the rose classes available, and that I could make a generalization sufficient to offer the results as a rose growing tip during my spring and fall rose workshops.

After my tests, I discussed the possible reasons with some distinguished, long-time consulting rosarians and plant biologists. In short, the real answer is that no one really knows why the roses (or any flowers, for that matter) live longer using the Listerine® treatment. Some speculate the antibacterial action of the mouthwash destroys the bacteria that cause decay. But if that were so, then any antibacterial mouthwash should do. This is not the case, however: Only Listerine® (or its generic equivalent) seems to hold this magical property.

Other rose scientists with whom I discussed this test suggest that the Listerine® may translocate up the cut stem of the rose, somehow preventing the breakdown of the cell walls within the stem, thus keeping the cells open and helping keep water and nutrients flowing up the stem.

To me, it's still a wonderful mystery and a great tip to offer new rosarians who want to keep their garden delights looking fresh and fragrant. It's also a great piece of advice to pass along to anyone receiving florist's roses from that "special someone." Simply recutting the stems under water, dipping them in the Listerine®, and replacing them in a vase of fresh water will make them last for a long, long time, which roughly translates to "up to 30% longer."

Mark Whitelaw is the owner of Landscape Consulting Services (LCS); a member of the Texas Nursery & Landscape Association; a member of the American Rose Society (ARS) where he serves as an on-line Consulting Rosarian (a "Cyber-CR"); and the Rose Garden Editor for Suite101.com, an on-line community based best-of-the-web guide. Email, mwhitelaw@markw.com WebSite, <http://www.markw.com> 

SOLANUMS: HAVING FUN WITH NIGHTSHADES

BY RICHARD HARTLAGE

POTATOES, *Solanum tuberosum*, as an ornamental do not strike high on the list of cool choice plants for summer annuals but some; of its very close relatives do. I was in San Francisco in August of 1997 visiting local retail nurseries and gardens when I found one of the coolest most sinister looking plants I have recently known. It was *Solanum pyracanthum*. Picture a loosely-branched perennial to two feet with olive colored narrow leaves that are pinnately lobed and lovely royal purple flowers like those of the tomato, another close relative. So far what's the big deal? Well now cover all the stems and the upper and lower mid-rib of each leaf with sunshine orange spines and place it so that it is back-lighted. I snatched up a small plant on the sales table with a greedy, gloating glint in my eye. Gardening is a competitive sport and this plant was going to get me bonus points with fellow gardeners back in Seattle.

This wasn't my only solanum find on this busman's holiday. At another nursery, The Dry Garden in Oakland, I found a silver leaved species, *Solanum marginatum*. Much bigger and rangier in stature and structure, with white stems. It has wider leaves, with white spines that are more dispersed over the venation on both surfaces of the leaf again; and the leaves are silver on top and snow white underneath. Another cool find and more bonus points! With later research I discover this plant to be a Mediterranean subshrub, and this last year learned that it can be cut back

hard to be grown more compact than five feet. I used mine in a large container with other silver leaved plants like, *Plectranthus argentatus*, *Senecio viravira*, and the white-splashed *Fallopia japonica* 'Variegata'.



PHOTO BY DIANE LAIRD

The tender but thorny Solanum quitoense growing as a container plant in the studio garden of Little and Lewis.

Well I was off to see Marcia Donahue's garden next. I had to make a pilgrimage to see her great plants and great sculpture arranged, in wonderful and wacky ways that are so refreshing. No same old anything in this garden—a truly fresh perspective to titillate and stimulate. Marcia keeps her finger on the pulse of hot new plants, and guess what one of her new and choice show things was: yet another solanum from

Ecuador, *Solanum quitoense*. This time I was looking at a plant with large palmately lobed leaves to eight inches long, and the plant stood four feet tall and didn't look like it had any intention of stopping there. The stems and foliage

were covered with a dusting of purple fur (?) well, hairs to be more precise. Wow again! I found out later this plant was introduced to the Bay area by Don Mahony through the Strybing Arboretum plants sales and he grew it from seed purchased from Chiltern's Seed in England. I grew it this year and my plant only grew to about two feet; but we had a cool summer in Seattle and it is safely tucked in the greenhouse awaiting next year. I can't tell you what its ultimate height will be as I haven't grown it long enough; but I heartily recommend you do some experimentation of your own.

This flurry of solanum exposure or overexposure got me interested in doing a little reading on the

matter. *Solanum nigrum* is one of the weediest temperate perennials in the world. That's that scrubby plants with the tomato-like flowers and the orange berries you continually pull out of the garden. There are in fact over 1200 species, mostly tropical, that grow as annuals, herbaceous perennials and biennials, sub-shrubs and shrubs, vines and lastly trees. The family is collectively known as nightshades because of the poisonous species. Liberty Hyde Bailey in the *Standard Cyclopedia of Horticulture* writes, "The genus seems to abound with plants of toxic

properties, although its bad reputation in this respect is probably exaggerated. Of the vast number of species, barely 25 are of much account horticulturally, and half that number will comprise all the species that are popularly known." Well that leaves fourteen more interesting plants to find and try.

I also began to think of others I have grown in the past. There is the foreboding *Solanum atropurpureum* from Brazil, with a very erect habit, to four feet, covered in backward curving black spines. Nancy Goodwin of Montrose, Hillsborough, North Carolina, shared seeds of this plant with me and she recommends *Solanum seaforthianum* as well. The references say that it is native to South America and list its common name as St. Vincent's lilac. The description says it grows to three feet and is covered in yellow spines, with pendulous flowering panicles of bluish purple or pink bell-shaped flowers. Sounds like a winner to me. I'll be trying it next year.

The blue potato bush, a plant I learned as *Solanum rantonnettii* 'Royal Robe', but since changed to *Lycianthes rantonnettii* 'Royal Robe',

makes a great subject for topiary. A friend says the propensity of the taxonomists to change names is matched only by the gardener's unwillingness to accept them. Anyhow, it has small leaves to 1 1/2 inches, and prolific quantities of royal purple, disc-like flowers make it great on the sunny terrace for the summer months. I trained my standard to about five feet tall, a two-foot diameter ball, but have seen them as large as ten feet with a six-foot diameter head. It is easy to store in a cool green house, as it is a subtropical from Argentina and Paraguay. This one is reasonably easy to acquire, as Hines Wholesale Nurseries grows finished standards; so ask your local nursery to order one for you if they don't carry it. I have seen a white flowering clone but it isn't as satisfying as the blue flowered form.

Another solanum I grew from seed this last year is sticky nightshade, *S. sisymbriifolium*. My plants are only one foot tall but I was impressed with the 1-inch flowers that were a great pale, steely blue with reflexed petals. I like it so far but don't know if it will distinguish itself for long-term culture in

my garden.

Experimentation keeps the garden alive and growing. I get bored easily so I am always searching for new plants to hold my attention. The key is to be selective by keeping only those plants that are excellent performers in your garden. Compost is valuable—get rid of the poor performers and dogs. Nightshades have been great fun for me these last two years. I am sure I will always grow the orange prickled *Solanum pyracantha*. It appeals to my sadistic side but it is also amazingly and uniquely showy. I used mine this year in a container with the golden orange *Coleus* 'Emmet' and the two were great together. Next year I think I will try it with a golden leaved Wandering Jew—whose name I don't know—that I brought back from Los Angeles this summer. Maybe later I'll try it with purple foliage and see what effects can be achieved with that combination. 🌿

Richard Hartlage is Director and Curator of the Elisabeth C. Miller Botanical Garden

A FEW OTHER NIGHTSHADES TO TRY:

- *Solanum aviculare* a lance-leaved—sometimes with one or two lobes—plant, to four feet, with purple disc flowers and purple stems. It is virtually indistinguishable from *S. laciniatum* if you see that one available. You don't need both.
- *Solanum capsicastrum* 'Variegatum' is the variegated Jerusalem cherry, a charming pot plant, especially around the holidays when its decked out in red fruit to show its Christmas cheer.
- *Solanum crispum* 'Glesnevin' is actually hardy to zone 7B in the milder areas of the country. It is a vine and is prolific in flower with thousands of blue stars. It is excellent trained against a wall as the English so often do.
- *Solanum jasminoides*, a tender vine with white star flowers that is great on a topiary form to be given any shape you can imagine or in hanging containers. I like the golden variegated form best, *Solanum jasminoides* 'Variegatus', to get added interest from the cheery foliage.

NHS BULLETIN BOARD



RICHARD A. BROWN (O) THE ARBOR FUND

Dick Turner (left), Editor of Pacific Horticulture Magazine, and Cherie Wetzel, Director, presented Terry Welch (right) with a thank you gift for opening his garden to the Friends of Pacific Horticulture. The Welch garden was breathtaking and the event was on one of the few dry days in June 1999.

NHS is one of the societies which supports The Pacific Horticulture Foundation, and Friends of Pacific Horticulture donate support in addition to their subscriptions.

***Pacific Horticulture Magazine** is available to NHS members at a discount with membership. The current Fall 1999 issue has articles by two of our members, Dan Hinkley ("The Solomon's Seals") and Richard Hartlage ("Looking for a WOW!"). If you are not a subscriber you can find **Pacific Horticulture Magazine** at the University Bookstore or Barnes & Noble.*



PHOTO BY MOLLE GROENDYKE

Ben Hammontree (center, holding puppy) taught Container Gardening, one of the many on-site NHS classes, in the lakeside estate garden he manages. Ben's exotic and tropical-looking containers were featured in the Pacific Magazine section of The Seattle Times on July 18, 1999; and he generously donated much of the plant material the class participants took home with them in their finished containers. During the class, a fire broke out on the property next door (below), threatening the beautiful tropical border. NHS did not charge extra for this excitement. (The NHS classes are limited to 15 -20 participants and fill quickly. They're listed on our calendar in the center of this newsletter.)



PHOTO BY MOLLE GROENDYKE

APHIDS: HOW TO CONTROL THEM WITH LESS TOXIC METHODS

BY CAROL SAVONEN; SOURCE: GAIL GREGLER, OREGON STATE UNIVERSITY

WHEN THE WEATHER WARMS UP, gardeners need to be on the look out for aphids—tiny, soft bodied, plant-sucking insects.

Aphids especially love the tender young plant growth so prevalent this time of year.

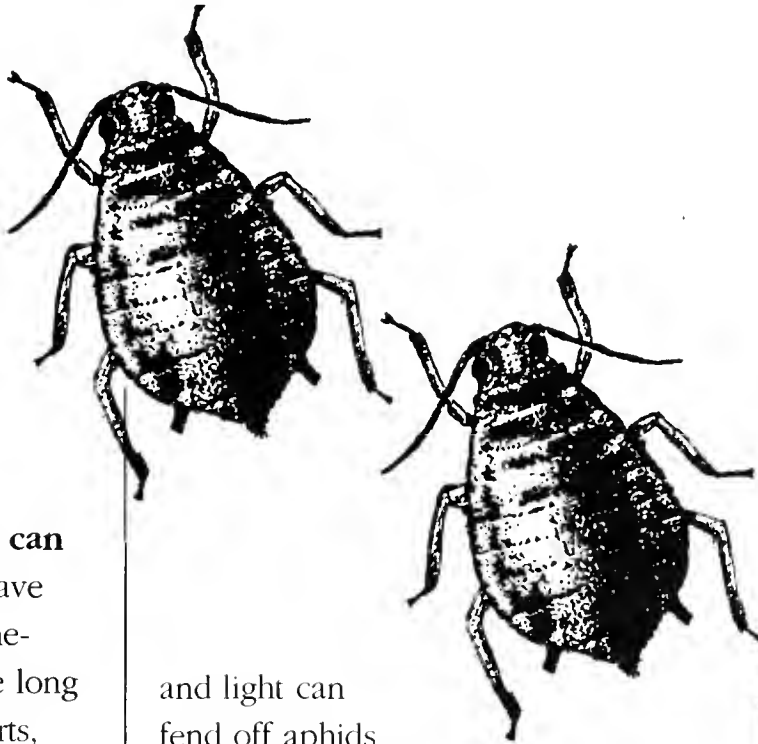
Most aphids are “naked,” without a hard exoskeleton, but some species have a soft cottony substance over their bodies. **They can be just about any color.** Some have wings and some do not. About one-tenth of an inch long, aphids have long hypodermic needle-like mouth parts, adapted to pierce and suck out plant juices. **Most secrete honeydew,** a sweet, sticky substance which is a food source for ants, bees and flies. Some kinds of aphids **may spread plant viruses from one host to another.**

Dripping honeydew also encourages sooty mold growth on many plants.

Gail Gredler, home horticulturist with the Oregon State University Extension Service, offered some strategies to keep aphid damage at a minimum without resorting to toxic chemicals. Because there are so many kinds of aphids with varying life cycles, she recommended the following diverse array of aphid control strategies:

- Use smart landscape design. **Do not have aphid-attracting plants where aphids or their honeydew will do harm.** For example, birches are notorious aphid-attractors. Don't plant birches near driveways or decks, or your vehicles and deck will be sticky with honeydew.

- **Keep plants healthy.** Plants with adequate supplies of nutrients, water



and light can fend off aphids more easily than sickly or stressed plants. **Avoid over-fertilizing.** Succulent new growth attracts aphids. The use of slow-release or organic fertilizers helps avoid an overdose of nutrients to the plants.

- **Remove aphids physically** from the plants they feed on. A periodic strong spray of water with the garden hose can work wonders with aphids on rose shoots and buds, bean plants, young broccoli and cabbage shoots and other tender garden foliage. Prune off badly damaged foliage.

- **Yellow sticky aphid traps,** sold in garden stores, trap flying aphids in a non-toxic sticky substance.

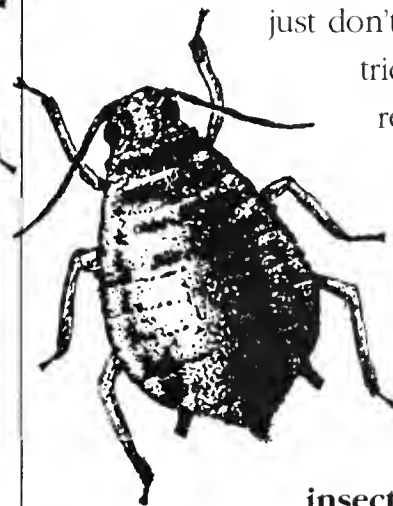
- **Introduce or encourage natural aphid predators.** Avoid the use of broad spectrum pesticides which kill aphid predators such as ladybugs and green lacewings. Do not purchase adult ladybird beetles, as they tend to disperse on release. A better predator to purchase may be the green lacewing, available for sale as eggs or larvae.

- **The best strategy is to grow**

plants that attract and foster natural predators. These include yarrow, wild buckwheat, white sweet clover, tansy, sweet fennel, sweet alyssum, spearmint, Queen Anne's lace, hairy vetch, flowering buckwheat, crimson clover, cowpeas, common knotweed and caraway.

If the above strategies just don't seem to do the trick, Gredler recommends

trying the **least toxic method of chemical control of aphids: commercial insecticidal soaps.**



These soaps, available at most lawn and garden stores, eliminate only the insects that come in direct contact with the soap.

This means you have to spray the soap solution directly on the aphids to eliminate them. Make sure to check the underside of leaves and other hard to see areas for aphids. And remember—the soap spray is only effective as an insecticide until it dries. For plants that are in the sun, test an inconspicuous part of the plant first to see whether it will cause leaf burning. Always follow label instructions.

Using insecticidal soap on aphids allows predator insects, with harder bodies to survive and naturally control aphids. Commercial formulations of these soaps have been extensively tested on plants so they are safer than homemade solutions. 🌱

AUTUMN HARVEST: EARLY AUGUST IS PLANTING TIME FOR FALL GARDEN CROPS

BY BOB ROST; SOURCE: JAN MCNEILAN, OREGON STATE UNIVERSITY


START THE FALL GARDEN BY MID-AUGUST, recommends Jan McNeilan, Consumer Horticulture Agent with the Oregon State University Extension Service. After harvesting early-maturing crops, replant vacant garden space with fall-maturing root crops. **Carrots, kohlrabi, onions, rutabaga, shallots and turnips are good for fall harvest and are all root crops that can be seeded in August.** Many root crops can be left in the garden during the fall and winter and used as needed.

Mid-summer plantings of leafy crops often do better in the garden than

spring plantings. **Chard, endive, kale, lettuce and mustard greens will supply greenery through the fall and into early winter.** Cole crops grow very well in late summer and can be harvested until the heavy freezes of winter. **Plant broccoli, Brussels sprouts, cabbage, and cauliflower transplants in early August. Plant bush beans by early August.**

Rework the soil before planting a new crop by rototilling or spading to a depth of six to eight inches to loosen the ground. Then apply one-half cup of 5-10-10 fertilizer for each 100 square

feet of row space. **Proper irrigation is very important** for mid-summer plantings. Lettuce, onion, carrot and radish seeds are planted near the surface of the soil and must be kept moist to allow germination. Frequent watering will keep germinating seeds from drying out.

Placing a one-by-four board or a piece of clear plastic over the row after it has been watered will help keep moisture in. After the plants poke through the soil, remove the cover. 

SPITTLEBUGS: FROTH ON LEAVES AND STEMS


BY CAROL SAVONEN; SOURCE: GLENN FISHER, OREGON STATE UNIVERSITY

GARDEN PLANTS "FROTHING" about the leaves and stems are victims of a small pest insect called the spittlebug, according to Glenn Fisher, entomologist with the Oregon State University Extension Service. Small, hopping, torpedo-shaped insects as adults, spittlebugs are similar in appearance to leafhoppers, but are larger and stockier. **Young spittlebugs are covered with froth, unlike leafhoppers.**

Spittlebugs feed on the leaves of many ornamental and vegetable garden host plants. Some even occur on conifers. **These small bugs introduce a toxin** into a plant's vascular system, causing the leaves to appear distorted,

yellow and/or stunted. They also like to feed on many types of grasses, and weeds and have also been implicated in transmitting a virus to strawberries.

The spittlebug overwinters in the egg stage, attached to leaf stems and leaves. Nymphs hatch out of these eggs in March and April. They position their little bodies so that their heads point downward; they insert their beaks into a stem, bud or new leaf tissue. Within a day or two, a white froth, or spittle begins to cascade down over their bodies from small glands located near their tail ends. **This froth protects the spittlebug from predators and prevents it from drying out.**

On strawberries, spittlebug injury is more than cosmetic or annoying. They can cause reduced yield and inferior fruit when numbering just a few per foot of strawberry row. Home gardeners can **reduce spittlebug damage by raking away leaves and stems** of strawberry plants during the winter to help remove egg sources. **Hosing the plants with a relatively sharp stream of water in the spring will dislodge some spittlebugs** from your plants and wash away the froth of spittlebugs. Without the froth, some of the very small spittlebugs will dry out, providing some control. 

THE NUTRIENT VALUES OF ORGANIC FERTILIZERS

BY CAROL SAVONEN; SOURCE: ROSS PENHALLEGON, OREGON STATE UNIVERSITY

DO YOU EVER READ GARDEN BOOKS that recommend chemical fertilizers with certain N-P-K (nitrogen, phosphorus, potassium) ratios? If you are an organic gardener, these numbers can be frustrating. Manure and other organic materials often don't come with N-P-K ratings, especially if they are purchased in bulk quantities.

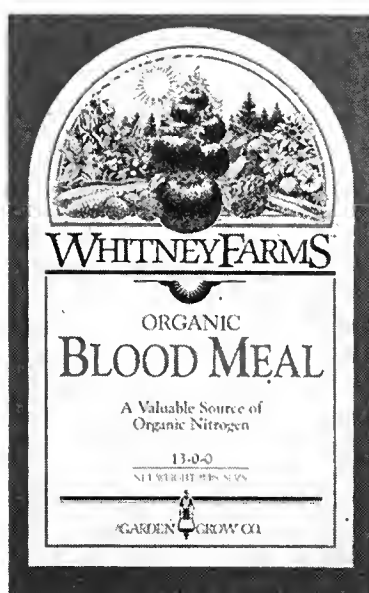
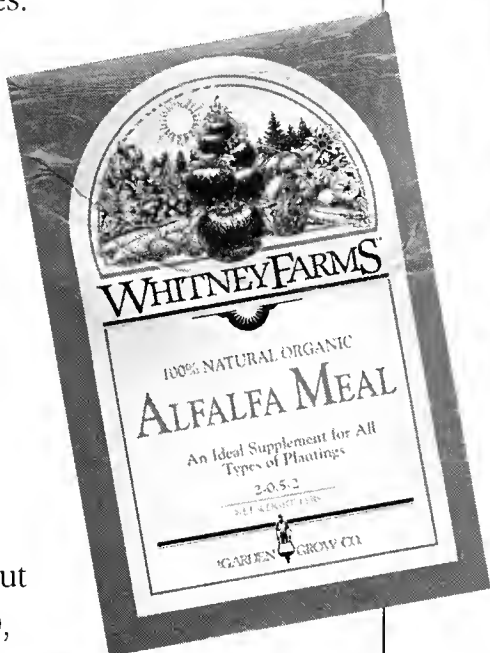
Organic gardeners are in luck. Ross Penhallegon, horticulturalist with the Oregon State University Extension Service, has collected information about the nitrogen (N), phosphorus (P) and potassium (K) content of many of the organic substances commonly used as fertilizer in the Northwest, including green manure crops such as crimson clover and alfalfa. His report, entitled **Values of Organic Fertilizers**, also contains information about how quickly an organic fertilizer releases available nutrients and a reference list on organic gardening.

One of the most difficult things to determine for an organic gardener is how much organic fertilizer to use, say on 1,000 square feet of garden. For a fertilizer with an N-P-K ratio of 12-11-2, this means:

- 12 percent is nitrogen,
- 11 percent is phosphorus and
- 2 percent is potassium.

In simple terms, this means each 100 pound bag of the fertilizer would contain:

- 12 pounds of nitrogen,
- 11 pounds phosphorus and
- 2 pounds nitrogen.



For example, using 12-11-2 fertilizer, if we knew we wanted to apply one pound of nitrogen, we would use one-twelfth of 100 pounds. This equals about 8 pounds of this fertilizer applied to get one pound of nitrogen out there in the soil.

Cover crops generally release their nutrients slowly, over a period of two to six months.

Nutrient values for cover crops include alfalfa (2.5 -0.5 - 2), crimson clover (2-0.2-2), Australian winter peas (3-0-1), annual rye (1-0-1). Bloodmeal (12.5-1.5-0.6), bat guano (8-5-1.5) and many of the manures (variable nutrient contents) release their nutrients over a period of two to six weeks.

Burned eggshells (0-.5-.3), fish emulsion (5-1-1) and urea (urine) (46-0-0) are the fastest-acting organic fertilizers, lasting only a couple of weeks.

To organically boost the nitrogen content of your soils, apply nitrogen rich urea (42-46 percent N), feathers (15 percent N), blood meal (12.5 percent N), bat guano (12.3 percent N) or dried blood (12 percent N).

Manures are usually less expensive than other animal by-products.


Organic amendments highest in phosphorus include rock

phosphate (20-33 percent P), bone meal (15-27 percent P) and colloidal phosphate (17-25 percent P).

High in potassium are kelp (4-13 percent K), wood ash (3-7 percent K), granite meal (3-6 percent K) and greensand (5 percent K).

To make soil less

acidic, gardeners want materials rich in calcium, including clam shells, ground shell marl, oyster shells, wood ashes dolomite and gypsum (all are at least 30 percent calcium carbonate or straight calcium).

To obtain a copy of Penhallegon's **Values of Organic Fertilizers** send a request and include a self-addressed, stamped, legal-sized envelope with two ounces of postage to: Lane County Office, OSU Extension Service, 950 W 13th Ave, Eugene OR 97402. 

PRESIDENT'S MESSAGE AN INTRODUCTION

Here I am, thinking what to plant where in the garden when I should be doing something presidential. That might be recruiting members for the Library Support Committee or practicing setting up NHS files on my computer. It isn't everyone who has a Microsoft employee living next door—and one who has agreed to be a counseling computer guru. We barter of course: such things as one hour of mentoring for three hours of weeding her garden. Does that sound like a deal?

Who would have guessed that a former public health nutritionist turned print artist turned back (and front) yard gardener would become president of the Northwest Horticultural Society? Not me, for one. From a humble start as a green volunteer for the NHS Fall Plant Sale to being recruited by Doug Bayley as a board member and.....

What's in store for the coming year? As usual, Richard Hartlage and his committee have lined up another great series of lectures, symposiums and classes. As a result of the symposiums over the past year, the membership has increased by 200. That should tell us something of the quality of the programs. The Fall Plant Sale will be held on Friday and Saturday, September 10 and 11. Barring hurricane type weather, hopefully it will be another banner sale as it was last year. The Auction Committee will swing into action in October this year in order to procure even better items than the recent and successful "Best Garden Party of the Year" chaired by Doug Bayley. These are only some of the highlights of the year to come.

Speaking of committees: Karin Kravitz—the one-person office support system without whom we would, well, stumble along—has offered to volunteer as Volunteer Chair. The response to the questionnaire mailed in the spring provided us with a considerable number of new volunteers. Karin has been setting up the member data base to tell us who wants to volunteer for what. In case you recycled your questionnaire without answering it and have had a change of heart, contact Karin through the NHS phone at 206-527-1794 or e-mail at nhsemail@compuserve.com. We can ALWAYS use more volunteers and are most appreciative of all your efforts.

Last year Ben Hammontree gave me a mystery plant from his wonderful collection. A couple of days ago it produced a most phenomenal flower out of the Little Shop of Horrors. *Dracunculus vulgaris*—VooDoo Lily he says it is. As described by Dan Hinkley in the 1999 Heronswood catalog, "...black-red jungley hooded flowers that make one's skin tingle with apprehension, if not simply, disgust. Morticia's wedding bouquet...." Now that's my kind of gardening.

See you all in the fall at the first lecture on September 8, the Plant Sale on September 10 & 11, and the Symposium, "Treasures of the Woodland" on September 18. We'll be off to a blazing start to be continued throughout the year.



Ann LeVasseur, President

Garden NOTES

EDITOR

Diane S. Laird
dianelaird@compuserve.com

DESIGNER

Constance Bollen,
CB Graphics

COMMITTEE

Douglas C. Bayley
Richard A. Brown
Richard Hartlage
Ted Marston

ALSO CONTRIBUTING TO THIS ISSUE:

Tony Avent
Linda Cochran
Mollie Groendyke
Lynne Harrison
Jack Hirsch
Casey Kelbaugh
Karin Kravitz
Ann LeVasseur
Gary Lindheimer
Stephen Nyikos
Robert Lee Riffle
Ernie Wasson
Mark Whitelaw
Phil Wood

OREGON STATE UNIVERSITY:

Glenn Fisher
Gail Gredler
Jan McNeilan
Ross Penhallegon
Bob Rost
Carol Savonen



NORTHWEST HORTICULTURAL SOCIETY

UNIVERSITY OF WASHINGTON

Box 354115

SEATTLE, WA 98195-4115

206-527-1794

Non-Profit
Organization
U.S. Postage
PAID
Seattle, WA
Permit No. 4842

**MILLER LIBRARY
UNIVERSITY OF WASHINGTON
BOX 354115
SEATTLE WA 98195-4115**