

GardenNOTES

 NORTHWEST HORTICULTURAL SOCIETY

SPRING 1998

GARDEN PARTY AND AUCTION TO BENEFIT MILLER LIBRARY

BY SUSIE MARGLIN

The third annual NHS garden party and auction is scheduled for the first Sunday evening in May, May 3, beginning at 6 p.m. NHS Hall will be filled with unique and tempting auction items. Delicious food and drink will share tables with donations for the silent auction: handmade pottery, stunning flower arrangements, and the best new gardening books. The McVay courtyard will be at the peak of spring color and lit by tiny white lights. Music will greet partygoers, adding to the festive atmosphere. The best nurseries are contributing plants, along with rare plants donated by private growers. Northwest artists have donated one-of-a-kind pieces for the home and garden, and an



known auctioneer Jerry Toner to run the live auction part of the evening. Last year's auction was a big success and great fun for all who attended. And best of all, the 1997 auction raised over \$40,000 for the Miller Library endowment! NHS hopes that this year's party will build on that initial success, raising more funds which will go directly into NHS's endowment account for the library, held by the Seattle Foundation.

The existing endowment, so generously provided by the Miller family to begin and expand the library, has never completely funded library operations, and has not kept pace with the demand the growing Northwest horticultural community places on library resources. The Miller Library answered more than 10,000 questions in 1997 from gardeners, students, and professional horticulturists. Building a secure and adequate endowment to ensure the library's future is NHS's goal for the next 5 years. Betty Miller's vision of a horticultural library to serve the gardeners of the Northwest has become a reality—and it needs your support.

You won't want to miss the Ultimate Garden Auction...a party...a great way to raise funds for the Miller Library! Join us and bid on the best

array of horticultural services provided by local designers and arborists, will be auctioned. You have to be there! So when your invitation arrives, RSVP right away—reservations are very limited as NHS Hall holds only 150 guests.

To spice up this year's auction, Steve Lorton, famous local personality and Northwest Bureau Chief for *Sunset* magazine will team up with well-

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Inside—

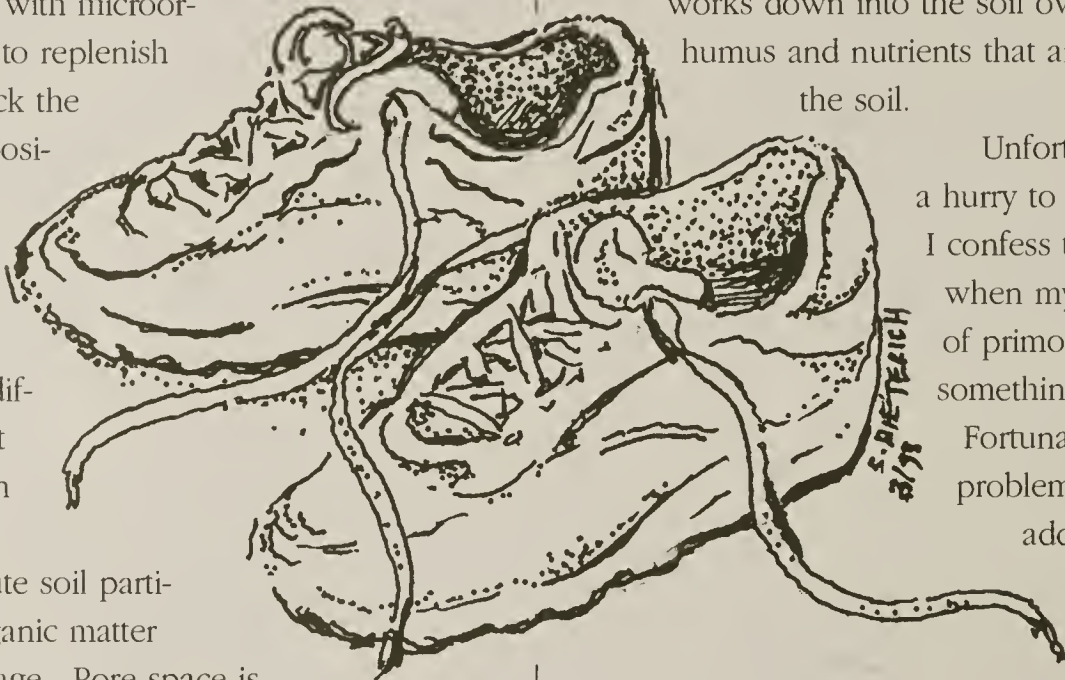
- ◆ COMPOSTING WITH CISCOE
- ◆ PRUNING YOUR ROSES
- ◆ 75 BEST GARDEN BOOKS
- ◆ GROUND BEETLES EAT SLUG EGGS!
- ◆ SURFING FOR GARDEN BOOKS
- ◆ SEEDLINGS...POTTING ON

MAKING GREAT COMPOST

(or How to Avoid the Primordial Heap)

BY CISCOE MORRIS

Have you noticed that some of the best gardeners begin the tour by taking you directly to the compost bin? I'm not surprised that the best gardeners value their compost piles. That sweet smelling, crumbly compost is teaming with microorganisms and humus needed to replenish the soil. Modern gardens lack the constant rotting and decomposition that occurs in nature. Addition of compost to sandy soils increases water and nutrient-holding capacity. Clay soil is more difficult to improve; however, it will benefit from the addition of compost as well. Adding compost will cause the minute soil particles to bind to the bulky organic matter allowing for improved drainage. Pore space is increased and root penetration is improved. There's plenty of truth to the old maxim that the plant in the ten-dollar hole will fair much better; it will require less fertilizer and water and will be more resistant to insect and disease problems. Established



gardens also benefit greatly from a covering of compost mulch each year. Soil temperature fluctuations will be moderated, evaporation slowed, and weed seed germination reduced. However, the most important effect is that the organic matter works down into the soil over time to replace the humus and nutrients that are used up or leached from the soil.

Unfortunately, not all of us are in a hurry to show off our compost pile. I confess that there have been times when my heap resembled some kind of primordial goo capable of birthing something out of the X-Files.

Fortunately, it is possible to fix the problem by turning the pile and adding some ingredients to get it going again; however, it will not be a fun project.

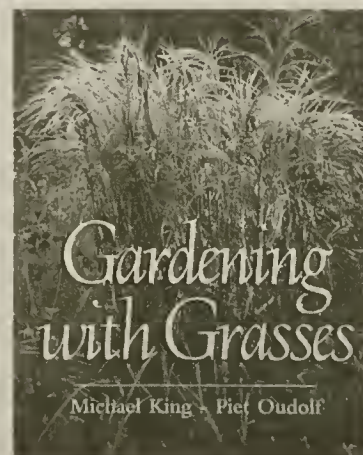
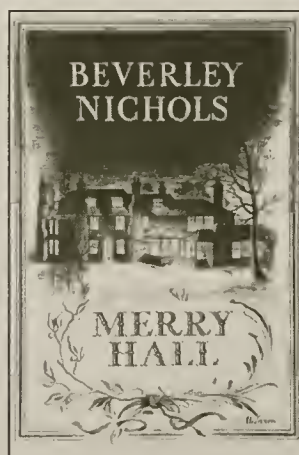
It most likely will smell worse than my old tennis shoes, and my old tennies are never allowed inside the house! It certainly is better to start off right and avoid the pitfalls. Hence a revisit to the basics of making good compost. ➤

GARDEN PARTY AND AUCTION

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array of horticultural goods and services assembled for an auction while enjoying a sumptuous appetizer buffet and hosted bar. For your viewing pleasure the very talented artists of the Guild of Natural Science

Illustrators will have a display of their botanical pieces in the Miller library the night of the auction. This is the same group whose exhibit you enjoyed at the Northwest Flower and



Original artwork, handmade pottery, garden sculpture and the best new gardening books are among the items available at the silent and live auctions

Garden Show. Enjoy the accuracy and beauty of their work up close and without the crowds!

Preview Parties. She has been involved in horticulture for years and tends a large garden in Medina. 🌿

For more information or to make early reservations, call Susie Marglin (425) 454-5978.

Susie Marglin is the chair of the NHS Library Auction Committee, an NHS board member, past board member of the Arboretum Foundation and former chair of their

BASIC REQUIREMENTS FOR GOOD COMPOSTING

Making good compost is not difficult. Here are the keys to success which I discuss in detail in this article:

- ◆ Construct a compost heap that is the right size
- ◆ Make sure it has a reasonable ratio of carbon to nitrogen
- ◆ Provide it with good air circulation
- ◆ Keep it moist (but not too moist)
- ◆ Turn it now and then

THE BIN

The first consideration is the bin. Anything will do, but the heap needs to be at least three by three feet and no bigger than five by five feet. Smaller than 3 x 3 does not get hot enough and bigger than 5 X 5 won't allow enough oxygen into the center. The container must allow adequate air penetration. Lack of air will encourage anaerobic bacteria to become active, and anaerobic bacteria are the culprits that cause the tennis shoe odor. Anaerobic compost becomes a slimy stinking mess that not only makes for bad neighbor (and marital) relations but is also worse than useless for the garden. The best system is to have three containers; then you can add to the newest pile while the others age. Using more than one container makes turning the pile easier. As the last bin is emptied, turn the compost by moving it to the next bin.

MATERIALS

Anything that grows can be composted. Most experts recommend a 30:1 ratio of carbon to nitrogen. Everything organic has a carbon to nitrogen ratio. Sawdust is 500:1 (500 carbon to 1 nitrogen). Grass clippings have a C:N ratio of 20:1 and leaves are 60:1. The kinds of things that contain nitrogen are grass, weeds and vegetables. Carbon materials include leaves from the trees, twigs, sawdust and shredded newspaper. As a guideline, two parts grass clippings to one part fallen leaves achieves a 30:1 ratio. A good ratio makes for hot compost that breaks down quickly. A well-constructed compost pile can reach 160 degrees! Carbon-rich heaps (such as a 50:1 ratio) will break down eventually; it just will take longer. Speed up the process by avoiding twigs that are too big to easily chop with a shovel. Leaves and twigs will break down much faster if they are run

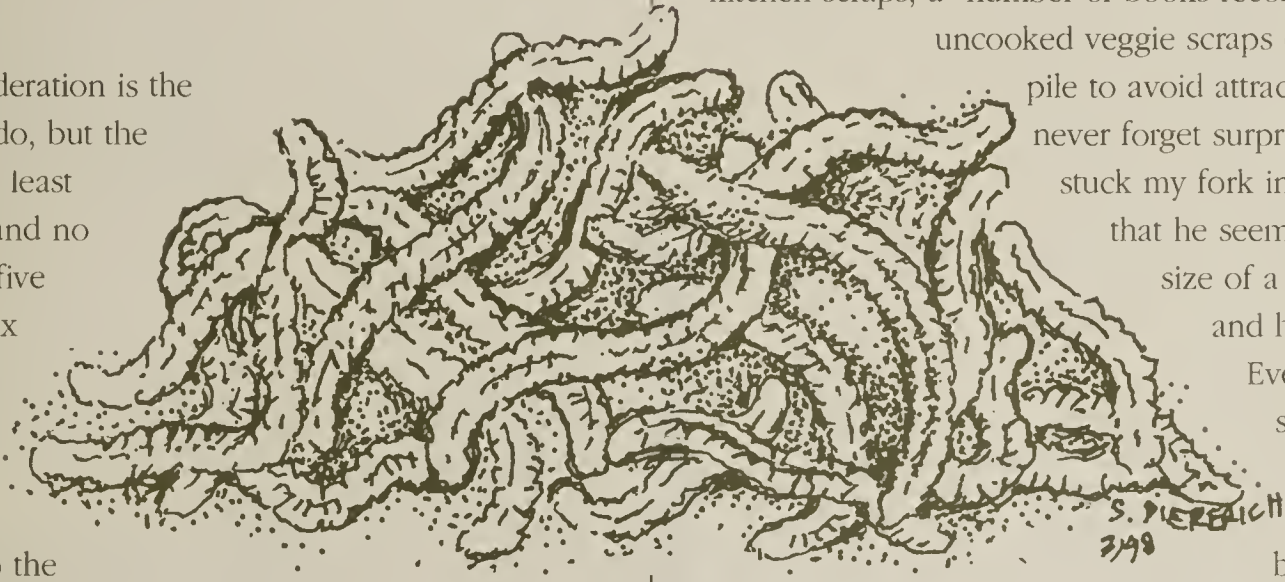
through a shredder or run over with a lawn mower.

There are things that should not be added to your compost pile. Most are common sense. Anything treated with pesticides should be avoided. Manure of any carnivorous animal may contain human diseases. Meat and dairy products don't break down, stink to high heaven, and attract unwanted critters. Avoid noxious weeds and diseased foliage unless you want to have plenty more of the same. One controversial material is kitchen scraps; a number of books recommend burying

uncooked veggie scraps deep in the compost pile to avoid attracting rodents. I'll never forget surprising a rat when I stuck my fork into the pile. I recall that he seemed to have teeth the size of a Doberman pinscher, and he was not happy!

Even my dog ran screaming in terror.

Needless to say, I now use a worm bin for kitchen scraps.



Many books recommend dividing the carbon- and nitrogen-rich materials in layers. I don't know who has the time to mess around with all of that. In fact, I find that mixing coarse materials (shredded leaves, twigs and bark) with fine materials (grass clippings, weeds and vegetable leaves) prevents the pile from packing down too much. Packed layers don't allow for air circulation, resulting in too much anaerobic bacteria and the feared tennis shoe stench

ADDITIVES

Adding nitrogen, lime and moisture can speed up the decomposition process, and improve the quality of the compost. Adding these ingredients can also help rehabilitate a pile that has either become inactive, or has become anaerobic. Nitrogen is the fuel required by the bacteria that break the organic substances down into humus. Lime will sweeten the compost making it an easier environment for the microorganisms to break the materials down. Dolomite lime will add calcium and magnesium, two nutrients that are generally deficient in Pacific Northwest soils. Providing the right amount of moisture is critical: the compost should be about as moist as a squeezed sponge. Too much moisture will drown the aerobic microbes and encourage those nasty anaerobic ones. Too little moisture will cause the microbes to go dormant, greatly slowing the decomposition process. The best time to add these components is during the turning process.

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MAKING GREAT COMPOST

continued from page 3

TURNING THE COMPOST PILE

It's possible to make good compost without turning the pile, but it takes a year or more and only the stuff in the middle will be well rotted. In most cases turning the pile is necessary to improve aeration and to move the less rotted stuff from the top and sides into the middle where the action is. How often a pile needs to be turned depends on how well the pile breathes, the mix of materials, moisture content and how fast you want it to decompose. Most compost heaps need to be turned at least once a month. More frequent turning will speed the decomposition process. Turning is the only way to bring a cold compost heap back to life. It definitely is required to renovate a stinky anaerobic one. This is the time to add the nitrogen, lime and water. Turning can also be used to dry out an overly moist heap.

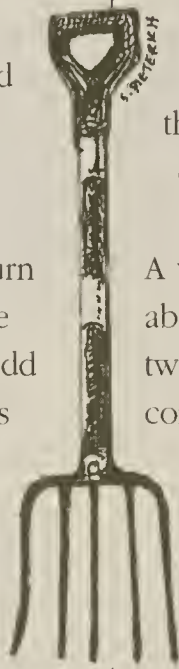
The easiest way to turn compost is to move it from one container to another. When the oldest bin is empty, turn the next oldest by moving it to the empty bin. Moving the compost to another bin works well, because it is easy to add ingredients and water. Little bits of coarse material such as shredded leaves or straw can be mixed in to increase air circulation if necessary. Nitrogen can be added in the form of fertilizer or manure.

Lawn fertilizer (never Weed-and-Feed) works quite well. Sprinkle a dusting of fertilizer (or a layer of manure) on the first six-inch layer of compost. Then put about twice as much dolomite lime as fertilizer (basically two dustings) on the next six-inch layer and continue until all of the compost is moved to the new bin. Add water to the various layers as needed if the compost is too dry. If the pile is soaking wet, it's best to move only some of the compost and leave it exposed to the sun to allow it to dry. Continue the process on sunny days until the moisture level is appropriate. Don't worry if it becomes too dry. It's not hard to add more water, although you will need to mix it in by turning the pile a bit. It's a good idea to cover compost piles with something to pre-

vent the compost from getting soaked in winter or drying out in summer. I like to use an old piece of carpet. That allows about the right amount of winter rain to soak in while slowing evaporation in summer heat. Even with carpet, you may need to add water during the heat of summer. Carpet is preferable to plastic because it breathes, allowing air into the compost.


Unfortunately, many of us have room for only a single compost bin. Good compost can be created with one bin, but be sure to turn the pile at least once a month. I usually use a fork. There are gadgets that are supposed to help aerate the center of the pile without turning; however, it's preferable to actually turn the pile unless it is physically impossible. That's because the goal is to move the material from the outside of the pile into the middle. It is also necessary to turn the pile in order to mix in the fertilizer, lime and water adequately.

One last note: I don't believe in using compost activators. A well-constructed pile generally has plenty of microbes available to do the work. I also believe that most of the bins that twirl to turn the compost are a waste of money. These fancy contraptions have disappointed many a gardener.



HAPPY COMPOSTING

I hope this helps you develop into a proud compost owner rather than one embarrassed by the pile in the back corner that looks like it just crawled out of the black lagoon, or worse yet, smells like my tennis shoes. If it already does, you best grab that fork, hold your nose, and go for it. The next knock on the door could be the neighborhood vigilante committee. Or perhaps it is time to move?

Ciscoe Morris is the Director of Grounds and Landscaping at Seattle University and a WSU Master Gardener. A Certified Arborist, Ciscoe still finds time to give more than 50 garden talks per year and teach at the Center for Urban Horticulture and Edmonds Community College. Visit his web site at <http://www.seattleu.edu/~ciscoe/> 

FOUR FREE LECTURES!

A New Benefit of NHS Membership

Great news for NHS members! You now get four free lectures during each membership year, and here is how it works: The Annual Meeting (May 17, 1998) is free, and this year Nancy Goodwin of Montrose Gardens will speak on the incredible collections and gardens she has spent the last 20 years develop-

ing. In addition to the annual meeting you can choose three other Monthly Lectures for which the cost would normally be \$5. You will need to present your NHS membership card at the door and we will punch it each time you present it. After you have three punches your card is full.

If you have lost your card, you may pick up a new one at the monthly lectures scheduled on May 17, 29 or June 6. (Please arrive early if you're getting a replacement.) The cards will not be replaced after the June 6 lecture.

GROWING PLANTS FROM SEED:

Recording Results and Potting On

This is the second in a series of articles on growing plants from seed by SUSAN HILPERT.

GERMINATION

The most frustrating part of growing plants from seeds can be the long wait for the germination of some species. It helps to keep a record of the planting date on a plant stake in each pot or tray, but plant stakes can get lost or broken; so it's also a good idea to keep a notebook to record any potting soil amendments, whether the flat of seeds was stored outside for the winter or in a protected (greenhouse) environment, and length of time for germination.

I was aware that it took up to two years for peonies to germinate, and many seeds require at least one winter in the ground before sprouting. Since many seed exchanges cannot get seed mailed before the end of winter, it can help to refrigerate seed for a couple of weeks to simulate winter. (The NHS Seed Exchange seed has all been refrigerated temporarily and then kept in cool storage.)

I often just let seeds sprout where they fall in the garden and carefully dig them up for potting in the fall. Of course, if you are making special crosses and want to know the parent source of each plant, letting nature do the work is out!

After two years, if nothing has come up in a tray, I will dump it out next to my pile of potting soil for recycling. This sometimes leads to some surprises. Just last week I noticed a lot of similar leaves emerging from the edge of my dirt pile. Closer inspection and careful sifting revealed over fifty small bulbs about 1/8" by 1/4" with emerging leaves up to two inches long. *Erythroniums* possibly. Time will tell.

POTTING ON

Now comes the harder part: potting on. Some people move the plants from one tray to another, simply allowing more space between. I prefer to move the plants from trays to four inch pots, since root tangling becomes more and more of a problem for most plants as they grow. The major exceptions are plants like *Platycodon* which have a large tap root, and various bulbs and corms whose fibrous roots tend to be smaller and shorter. If the plants are slow growers, I may put four or even five evenly spaced seedlings, in one pot.


Because I grow a large quantity of seeds, I place the four inch pots in trays (preferably the rectangular rather than the square trays). I usually prepare at least three trays of receiving pots at a time, stack them on a bench at a good working height and next to my community tray of seedlings. Starting from a corner, I lift the layer of soil and break off a section about an inch and a half in diameter. There may be only three or four plants in the clump or ten times that! If the roots are quite tangled, I may swish the whole thing in a bucket of clean water to remove as much soil as possible and then gently tease the roots apart, planting each seedling as soon as it is free of the clump. If the roots are not very tangled, then it helps to leave as much of the soil intact as possible when moving the seedlings.

If liverworts or mosses have invaded the pot, it is important to carefully remove these from around the seedling before replanting. I never wear gloves when working with seedlings, and it helps to have fingernails! The most important thing to remember is that most

seedlings are very fragile. The loss of a few of the roots doesn't necessarily matter, but a broken stem is doom. With tough plants like many shrubs and trees, there isn't a serious risk, but hellebores, for example, have very fragile stems as seedlings, and often the roots are tougher.

When the seedling is placed into the waiting hole of the new pot, it is most important not to plant it too deep. I actually like to place the plant a little bit high and build up a small hill of soil up to the crown. This helps prevent rotting out, and more soil can be added after watering if needed. Most plants won't tolerate having the stem buried, even the slightest bit. Also, while it is important to firm the soil around the roots, one should not pack it in too tightly.

How do you know when to plant on? I usually wait until there is at least one set of true leaves. Of course, if the seeds were planted in a four inch pot, and only one or two came up, then the chore can wait until roots are showing out of the bottom of the pot. Other important things to remember are to pot up on a cool day, try to work in a shady area, and (even if the plants are major sun lovers) during summer weather, place the tray in the shade for at least one day to prevent or lessen transplant shock. Add fertilizer as needed. (3:1:3 is the recommended ratio based on new research. It was almost impossible to find last year, but this year hopefully will be more available). Usually I wait a few days after transplanting, unless I'm adding a time-release fertilizer.

Susan Hilpert is Chair of the NHS Seed Exchange and a botanical illustrator. She is also a landscape architect and partner in Hortiscape Northwest, Inc. 

WHAT HAPPENED WHEN THE ROYAL NATIONAL ROSE SOCIETY PRUNED WITH ELECTRIC HEDGE TRIMMERS?

COMPILED BY DIANE S. LAIRD AND REPRINTED WITH PERMISSION OF THE RNRS AND AUTHOR AND RNRS SECRETARY, KEN GRAPES.

*A couple of years ago, friends in England told me that the RNRS had discovered that pruning rose bushes "crewcut style" with electric hedge trimmers resulted in stronger, healthier plants with more flowers and better quality, stronger growth. Another method, called "Rough Pruning" was tried with pruning shears. In both cases, the plants pruned in this manner outperformed the rose bushes pruned in the traditional method (see **Pruning Methods Compared**). The trials began in 1990 and have continued to date. The follow-up report (1997) is below.—Diane Laird*

PRUNING METHODS

TRADITIONAL PRUNING All stems were pruned just above outward facing buds with the cuts sloping down away from the bud. Dead or damaged shoots were cut back to healthy wood and the centers of the bushes were thinned out if overcrowded. Old or weak stems were cut back to a quarter of their length or removed altogether. Stems of the large-flowered (hybrid tea) roses were cut back to at least half their length. the cluster-flowered (floribunda) roses had some old stems cut back to within a few inches of the ground whilst new shoots growing from the base were only lightly pruned.

ROUGH PRUNING The shoots were all trimmed with pruning shears at the same level and all the cuts were roughly horizontal. The RNRS did not worry whether the cuts were above a bud or not. Each rose was trimmed to the same height as the traditionally pruned block in that bed. Any dead wood was removed.

HEDGETRIMMER PRUNING Roses were cut to the same height as the Rough Pruning Method using a hedgetrimmer. No dead wood was removed. The hedgetrimmer cuts were very ragged, leaving lots of snagged and ripped shoots.

FOLLOW-UP REPORT

Observations Since the Original 1990 Pruning Trials by the RNRS

GENERAL

♦1. The eight beds of roses, which were the subject of the original pruning trial, have been pruned using the same methods every year since 1990. The original conclusions have been confirmed. These were that:

a. Rough and hedgetrimmer pruning produced the most new shoots and the most and largest flowers.

b. There was no problem from dieback—this is a great testimonial to the vigour of modern English roses. Small dead "snags" can easily be snipped off for cosmetic purposes by the tidy gardener.

c. There was no evidence whatsoever of increased disease arising from the retention of the twiggy branches on roses pruned by the rough and hedgetrimmer methods.

♦2. Why then have these two latter methods produced better roses, with no obvious ill effects, than does conventional pruning?

ADDITIONAL CONCLUSIONS AND TRIALS

♦3. There is only one major difference between the rough and hedgetrimmer methods on the one hand and conventional pruning on the other. This is that, with conventional pruning, all the weak non-flowering stems are removed; under the other methods they are retained. **We believe that the foliage borne by these retained weak and spindly shoots is the reason for the enhanced performance of the plants concerned.** The simple logic being that plants find much of their energy by the process of photosynthesis, whereby the foliage converts light into energy. The more foliage—the more energy.

♦4. To test this theory, a further 6 beds of roses were used—3 of cluster flowered (floribunda) varieties and 3 of large flowered (HT) varieties. Each bed holding about 50 well grown plants. Half of each bed was pruned conventionally, **removing** all weak and twiggy stems, the other half being pruned conventionally, but **retaining** them. The addition-

al growth put on by the plants with retained stems was very noticeable.

They made bigger plants and came into flower a little sooner. After three years, we are sure that this is the reason for the success of the rough and hedgetrimmer pruning methods.

◆5. Of course, there is no need to use a hedgetrimmer when pruning roses, the same benefits can be achieved by pruning with secateurs—as long as the twiggy branches are retained.

REGENERATION

◆6. After five years, some of the varieties in the original trial had produced such thick stems that it was physically impossible to prune them with a hedgetrimmer. In the rough and hedgetrimmer trial no old stems had been removed at the base to promote regeneration of the plants. It was decided therefore that two beds should be given a hard pruning by conventional methods to see if the plants would regenerate themselves by the production of new basal growths and thereafter to assess their performance. Both beds, each of 50 roses, responded extremely well. They were reduced to an acceptable height, plenty of new basal growths appeared and both beds performed well in the first summer and since.

There would therefore, and subject to further trials of this process, seem to be no long term drawback to the use of a hedgetrimmer or rough pruning. Of course, the advantages arising from the retention of the weak

growths and regeneration can be achieved at the same time by conventional means using secateurs, loppers and pruning saws—but, it is re-affirmed, no long term harm arises from the use of the unconventional methods.

DEADHEADING

◆7. The principle that roses (like most plants) will do better with the maximum amount of foliage, has been used in a deadheading trial. Here a comparison was made between the convention of deadheading back some 3 to 5 leaves to a good dormant bud, and with the snapping off of the spent bloom at the

will eventually germinate and propagate the species.

◆8. In this trial we have so far used only large flowered (HT) roses. These have an easily found abscission layer (a slight swelling in the stem usually where there are the first small leaf-like bracts on the stem). In the trial, a large bed of one variety of HT was used. (In the first trial 'Ingrid Bergman,' in the second 'Blessings' and in the third 'Freedom'.) Each bed was divided in two and one half deadheaded conventionally, the other by the "snapping off" method.

◆9. The results were, once more, most surprising.

The roses which had the spent blooms snapped off not only came back into bloom more quickly, but produced appreciably more flowers.

Whereas with conventional deadheading only one new flowering shoot arose, with the snapping-off method two and sometimes three new flowering shoots appeared.

◆10. As a "spin-off" from the pruning trial, it seems that a valuable further lesson has been learnt. The trial is now being extended to cluster flowered (floribunda) roses to see if the same applies.

Further information on this and other cultivation trials

being conducted by The Royal National Rose Society can be obtained by writing to The Secretary General, The Royal National Rose Society, Chiswell Green, St. Albans, Herts, AL2 3NR, U.K. 🌹

Pruning Methods Compared

Large-flowered (hybrid tea) roses

	TRADITIONAL PRUNING	ROUGH PRUNING	HEDGETRIMMER PRUNING
SHOOTS, NEW GROWTH			
Quality of growth
Overall shape
Extent of dieback
FLOWERING			
Size of flower
Quality
Quantity

Cluster-flowered (floribunda) roses

	TRADITIONAL PRUNING	ROUGH PRUNING	HEDGETRIMMER PRUNING
SHOOTS, NEW GROWTH			
Quality of growth
Overall shape
Extent of dieback
FLOWERING			
Size of flower
Quality
Quantity

.. LOW SCORE

..... HIGH SCORE

abscission layer [Note: this is in the area at the base of the flower]. This layer of corky tissue is provided by nature to help the rose hip to fall to the ground (like an apple) so that the seeds inside

THE ELISABETH C. MILLER LIBRARY A LIBRARY FOR GARDENERS

BY VALERIE EASTON

Betty Miller's brainchild is a lively place, not your typical university library. Her idea was to create a unique hybrid, a place where gardeners could come with their questions, a resource that would also serve and be nurtured by the students and faculty of the Center for Urban Horticulture. Add professional horticulturists such as zoo grounds-keepers, garden designers and City of Seattle arborists into the mix, along with staff, dedicated volunteers, and the occasional class of school kids and you have the Miller Library, nearly 13 years old and answering upwards of 10,000 questions each year.

To give you an idea of what Northwest gardeners are wondering about and working on, here are a few of the questions we were asked in January:

- ◆ What is the Scofield heat unit for peppers?
- ◆ Are the berries of *Leycesteria formosa* poisonous?
- ◆ Do you have guidelines for selecting street trees?
- ◆ Does sumac have a taproot?
- ◆ Can the root ball of date palms be used as a food source?
- ◆ Is *Malus* 'Snowdrift' disease resistant?
- ◆ Where can I find copyright-free botanical images?
- ◆ Which herbs were mentioned by Shakespeare?
- ◆ What is a source for *Rhododendron* 'Blainey Blue'?

As the only public horticulture library west of Denver and north of San Francisco, the Miller Library answers dozens of such questions in person, over the telephone, and by email every day.

The collection of nearly 8,000 books is housed in a 4,500 square foot space located at the University's Union Bay Campus just east of University



MARY RANDLETT

ELISABETH CAREY MILLER

Betty Miller will be long remembered as one of 13 co-founders of NHS, as benefactor of the Elisabeth C. Miller Horticultural library named in her honor, as an advocate of urban horticultural practices based upon good science and not gardening folklore, and for the wonderful garden that bears her name and so beautifully reflects the art of her gardening and her curiosity of the plant world. —Richard A. Brown

Village with easy parking readily available. The majority of the books are on horticulture and gardening, but there are also titles on botany, environmental science, soils and garden design. Where else can one find hundreds of books on rhododendrons or roses and shelves of books on vegetable gardening, pruning

or growing vines? Many gardeners peruse the library's collection to determine favorite authors or titles before ordering the books from their bookstore or local library.

While the core of the collection is for reference and research, we now have over a thousand books and videos available for checkout. Just register to borrow books as at a public library, and take home three titles at a time for three weeks. Visitors can browse through the newest gardening magazines from England (choose from 300 journal and newsletter titles), or pick up booklists created by the staff on topics such as "Children and Nature," "Hellebores," or "Vines and Climbers." Our most popular handout lists seasonal plant sales; for updates visit our web page.

Files hold more than 800 of the newest seed, bulb and nursery catalogs. A fine collection of old and rare books, many with hand-colored illustrations and beautiful bindings, are housed in a climate-controlled room and can be viewed by appointment.

A new multi-media computer station gives the public access to a comprehensive journal index and gardening CD-ROMS, such as Michael Dirr's *Photo-Library of Woody Plants*, *Flora of the Pacific Northwest*, and *3D Landscape*. Explore the library's own web page which includes booklists and new titles, plus links to other horticultural web sites of interest to Northwest gardeners.

Many thanks to the NHS, the Miller Charitable Foundation and the many other individuals and groups whose support keeps the shelves stocked with new materials, the computers humming, and the library doors open 49 hours each week. 🌱

STAFF

Valerie Easton, Library Manager
Martha Ferguson, Library Technician
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GARDENERS' CHOICE

BY VALERIE EASTON

People come into the Library looking for the single best book on a subject, hoping for one perfectly inclusive title on, say, taxonomy, roses, organic gardening or tree care. No such animal exists—in any gardening category. Some books are certainly more accurate, newer, better illustrated than others but so much of it has to do with the personal likes and dislikes of the reader, how they absorb information, if a specific author talks about things in a way to reach your own heart and mind.

I asked seven stellar gardeners which of their books was most dirty and mangled, proof of repeated use for practical matters; which gardening author they loved the most; and which book, new or old, they were most lusty after for their own home libraries. Gardeners are an opinionated bunch, both the readers and the writers; few titles were mentioned twice, and none of the respondents could limit themselves to one book in any of the categories. One proved unable to limit herself to what has yet been written.

MOST PRACTICAL AND USEFUL CATEGORY:

Sunset Western Garden Book is dog-eared, with cat hair and coffee all over it. I keep a copy at home and one



at the office. It isn't pretty, but it's got the basics. And I use the Heronswood catalog for reference all the time. Diane Laird, NHS President

Dictionary of Flowering Plants and Ferns by Willis is my favorite for families and generic stuff; I have a well worn copy. *Hortus Thrid* is the first book I grab when I'm looking for basic

information. *Index Kewensis* on CD ROM for taxonomy, and the *Royal Horticultural Society Dictionary* all come to mind. Dick Brown, Executive Director, Bloedel Reserve

What can I say? My favorite gardening books are dated, dry, and dull—they are, in fact, my old college texts with titles like *Soil Fertility* and *Plants in the Landscape*. They provide no inspiration and recommend no cutting edge techniques, but they taught me and continue to remind me, of the importance of mastering the basics first. Landscape horticulture can be defined as the art and science of growing ornamental plants. These old books taught me the science; now through practice I am pursuing the art. Dave Stockdale, Education Coordinator, CUH

Most useful for me are George Schenk's *The Complete Shade Gardener* and Art Kruckeberg's *Gardening With Native Plants of the Pacific Northwest*. I refer to these again and again; both are sprightly, informed, reliable, indispensable. Mary Robson, WSU/King County Extension Agent.

I use both the *Index of Garden Plants* by Mark Griffith and the *RHS Plant-Finder*; they are current,

Continued on page 13 ►



RICHARD A. BROWN © THE ARBOR FUND

NHS Booth Wins the Award of Merit

Michael Boswell designed the booth for the Northwest Flower & Garden Show. The booth was given the Award of Merit for Best Educational Booth. Michael is Head Gardener at the E.C. Miller Botanical Garden. Thank you and congratulations, Michael!

We would also like to express our thanks and deep appreciation to the enthusiastic NHS members who staffed the booth and helped with the materials handed out. A number of people joined NHS as a result of their efforts!

NHS CALENDAR OF EVENTS

DATE, DAY & TIME	EVENT NAME	FEATURED SPEAKER	TYPE OF EVENT
April 16, Thursday 7 pm Reception & Book Signing 7:30 Begin	Putting Perennials in Their Place: Creating a Context	Ann Lovejoy , Author and Proprietor of the Sequoia Center (a school for gardening classes and the healing arts near her home on Bainbridge Island).	Slides & Lecture; Ann Lovejoy also sign a selection of her books available for purchase at the event
May 3, Sunday 6 pm	NHS Third Annual Library Auction & Garden Party	Steve Lorton of Sunset Magazine will team up with Jerry Toner , Auctioneer	Silent & Live Auctions, Appetizer Buffet, Hosted Bar
May 17 Sunday 7 pm Reception 7:30 Begin	NHS Annual Meeting & Free Lecture	Nancy Goodwin , Writer, Gardener and Owner of Montrose Nursery and Gardens	NHS Annual Meeting; Slides & Lecture
May 21 Thursday 1:30 pm	Designing, Installing & Maintaining the Shade Garden	Richard Hartlage , Director & Curator of the E.C. Miller Botanical Garden	In-Garden Class Co-Sponsored by the E.C. Miller Botanical Garden
May 29, Friday May 30, Saturday	Fern Festival		Plant Sale
May 29, Friday 7 pm Plant Sale 7:30 Begin	Woodland Treasures: Form, Color & Texture in the Garden	Don Jacobs , Owner of Eco-Gardens Nursery & Author of <i>Trilliums in Woodland Gardens</i> , <i>American Treasures</i>	Fern Festival Continues w/ Slide Show & Lecture
June 6, Saturday 7 pm Reception 7:30 Begin	Old Roses & Companion Plants: An Integrated Approach	Holly Shimizu , Managing Director of the Lewis Ginter Botanical Garden	Slides & Lecture Heirloom Roses will be for sale the lecture.
July 15, Wednesday 1:30 to 3 pm	Border Maintenance & Grooming	Glenn Withey Charles Price	In-Garden Class Display Border
July 24 Friday	Great Gardens' Gardeners Pre-Symposium Events		Nursery Open and Wine Reception at Heronswood <i>Wine Reception limited to 100.</i>
July 25, Saturday 9 am to 4 pm	Great Gardens' Gardeners Symposium	Nori Pope , Hadspen House, England; Sybille Kreutzberger & Pamela Schwerdt , formerly of Sissinghurst Castle , England; Wayne Amos , The White House, Washington, DC; and Lauren Springer , Masonville, Colorado	Symposium Co-Sponsored by Heronswood Nursery, Ltd.

APRIL THROUGH JULY 1998

DESCRIPTION	COST: MEMBER / NON	LOCATION
Favorite of Northwest gardeners for her wit and wisdom on Cascadia gardening, Ann Lovejoy is also internationally known for her books and articles on gardening and design. At this lecture, Lovejoy will share her thoughts on weaving perennials into the layers of the landscape and using companion plants to maintain and enhance blooming displays.	\$5 / \$10	Museum of History & Industry 2700 24th East, Seattle
Garden party, silent auction and live auction is The Ultimate Garden Auction featuring the best array of horticultural goods and services assembled for an auction, a sumptuous appetizer buffet and hosted bar.	\$50 per Guest <i>Limited to 150</i>	NHS Hall Center for Urban Horticulture (206) 527-1794
Goodwin, highly respected gardener and owner of the nationally-recognized Montrose Nursery comes to town to talk about her gardens. Montrose gardens have been featured in Horticulture, Garden Design, House Beautiful and Garden of Eatin'. Goodwin herself is a regional writer for Country Living Gardener.	Free	NHS Hall Center for Urban Horticulture 3501 NE 41st Street (206) 527-1794
It's not only what will grow, but which plants will look spectacular in the corners and parts of your garden. Hartlage will guide you in shade garden design, showing how to create interest with flower & foliage. Learn how to turn shade into a garden to rival any sunny border.	\$15 / \$25 <i>Limited to 15</i>	Elisabeth C. Miller Botanical Garden The Highlands, Shoreline Register: (206) 527-1794
Sale Times: 1-4 pm and 7-7:30 pm (before the lecture) Saturday 10 am to 2 pm	Plant Sale: Free	NHS Hall Center for Urban Horticulture
His expertise in ferns and woodland gardens comes from years of field research, and education. He has traveled extensively throughout North America as well as China, Japan, Thailand, and Central and Eastern Europe and introduced some of these plants into our gardens.	\$5 / \$10	NHS Hall Center for Urban Horticulture 3501 NE 41st Street (206) 527-1794
Frequent and entertaining speaker, Holly Shimizu is well known to viewers of Story Garden and brings with her a wealth of professional garden experience. She will discuss gardening with Old Garden Roses.	\$5 / \$10	NHS Hall Center for Urban Horticulture (206) 527-1794
One of the most well-known designers today as they explain the practical aspects of the garden border - maintaining the look you want. Class members perform summer cleanup of this beautiful display border.	\$15 / \$25 <i>Limited to 15</i>	Wells Medina Nursery Bellevue Register: (206) 527-1794
Heronwood Nursery will host two pre-symposium events on Friday, July 24 , for people attending the Great Gardens' Gardeners Symposium. The first is a Nursery Open , during which people may shop at the nursery on a first-come, first-served basis from 9 am to 3 pm . This will be an opportunity to find special plants at special prices, as well as summer-blooming perennials in bloom. The second event is a Wine Reception from 3 to 5 pm during which attendees will meet the symposium speakers in a relaxing atmosphere in the gardens at Heronswood. Refreshments and hors d'oeuvres will be served during this informal reception. Participants at either event will have an opportunity to tour the gardens at Heronswood .	Free, but open only to those registered for the Great Gardens' Gardeners Symposium (below)	Heronwood Nursery Kingston Washington 7530 NE 288th Street To register, call NHS: (206) 527-1794
Heronwood Nursery and the Northwest Horticultural Society have joined forces to bring hands-on gardeners of some of the world's greatest gardens together for a symposium in Seattle, providing their insight into the practicalities of their work. Join these great gardens' gardeners for an electrifying day of observing the techniques involved in making and maintaining gardens; both large and intimate, formal and very private. Symposium attendees are invited to an afternoon reception with the speakers, in the gardens at Heronswood the Friday afternoon prior to the Saturday symposium.	\$95 / \$115	Museum of History & Industry 2700 24th East, Seattle To register, call NHS: (206) 527-1794

FINDING & ORDERING GARDEN BOOKS OVER THE INTERNET

BY DUANE DIETZ

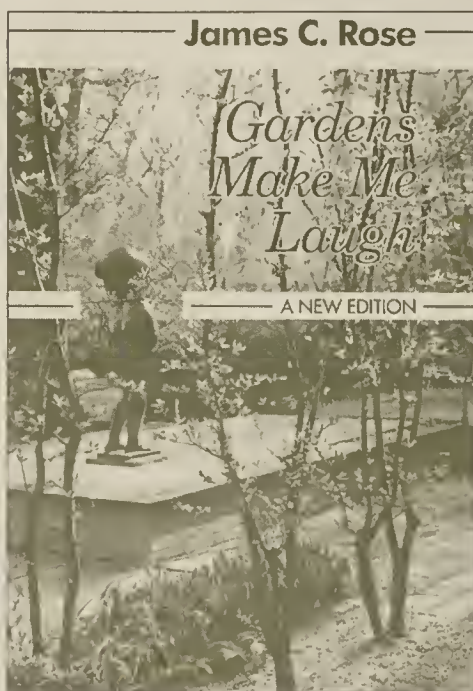
Have you ever noticed the way that all garden books start with a poem? That kills me. I don't know why they do it. I guess it's supposed to show what a lofty, far-away subject they're dealing with . . ." James Rose, **Gardens Make Me Laugh**.

I have always recommended James Rose's book **Gardens Make Me Laugh** to my friends. I'd read a passage from the book and the response was always the same. . . "Where can I buy the book?" It's been out of print for years, but I would find the odd copy here and there, sometimes selling for outrageous prices. It has always been a pleasure give copies to friends, but I was looking for a way to buy several at a time, and at a reasonable price. After slogging through hundreds of used bookstores across the country, someone recommended that I try using the Internet. Shopping from the comfort of your own home is rather appealing. . . and it does give you a reason to surf the web.

Shopping over the Internet really isn't too tough, but if you haven't experienced the web, the first try can be a bit intimidating. This isn't meant to be an exhaustive treatise on the subject, but having purchased more than 110 books over the last two of years using the Internet and having found some RGBs (Really Good Buys), I feel qualified to pass on a few tips.

There are really two good reasons that I shop the Internet. First is selection. Just about everything that has been published can be found if you know where to look. Selection also provides the opportunity to comparison shop. For example, when using the American Book Exchange search engine for Arthur Kruckeberg's book, **Gardening with Pacific Northwest Natives**, the 1982 hardcover with dust jacket was \$55.00, the 1993 paperback edition was \$17.95, and the new 1997 revised edition was \$35.00. Amazon.com also had copies of the 1997 revised edition but with their 20 percent discount, a copy could be purchased for \$28.00.

The second reason for shopping on the Internet is the search service that most of the dealers provide. They will search for any title for up to 6 months, usually without charge. Many of the book auctions in the U.S. and Canada are now happening over the Internet, but I never find out about them in time. Dealers can compare auction catalogs with their search lists and




notify me when a book I am looking for becomes available.

SEARCHING THE DEALER CATALOGS

Most catalogs are sometimes spare in the description of the books. Usually included is the author, title, date, a brief description of the condition of the book and dust jacket (the paper around the book), and the price. Read this description very carefully. Pay particular attention to whether a dust jacket is mentioned. If not mentioned, the book possibly has none. Also note whether the book is stated to be a first edition. If the description doesn't say so, it may not be. The description should also note if the item is signed, numbered, or has other distinguishing points. Usually, the book will (should) be in pretty nice condition if no faults are mentioned. Dealers are always happy to answer questions, either by email or by phone. If you buy a book and it very obviously differs from the description when it arrives, you have the right to call and arrange for a return.

ORDERING

I have not been comfortable with sending my credit card information out over the Internet. There are too many hackers out there trying to break into systems to steal credit card numbers. When you find a book you'd like to purchase, I recommend either calling or e-mailing the dealer and confirm that the book is still available. Ask the dealer to total the charges for shipping and handling. Then you can write a check or give your credit card information over the phone. Most dealers will place the book aside until the check arrives. The book is shipped to you as soon as the monetary transaction is complete. Which brings up shipping and handling...review the charges and the return policy carefully. Some dealers have strict rules about book returns. Also, check how the book is being shipped (UPS, FedEx, Post Office). And have fun searching the Internet for that book you've been looking for.

Duane Dietz is a landscape architect who spends too much time and money buying books over the Internet. He is also an NHS board member and director of the Pacific Northwest Garden History Society. 

Book Dealer Sources

AMAZON.COM (www.amazon.com)

Amazon, a Seattle-based Internet-only book-seller, is one of the best sources for recently published garden books. Most titles are offered with a 20 to 30 percent discount off the cover price. They ship books between 24 to 48 hours within receipt of your order. Amazon does have out-of-print search capabilities, but no guarantee as to pricing or condition. They will search for out-of-print books for up to 6 months.

AMERICAN BOOK EXCHANGE

(www.abebooks.com)—The American Book Exchange has 1,970 member book dealers (such as Fortner's Books on Bainbridge Island, Shorey's Bookstore and Arundel Books in Seattle). All these dealers maintain catalogs through the American Book Exchange web page, which can be accessed through author, title, publisher, subject, and keyword searches.

BIBLIOFIND (www.bibliofind.com)

Bibliofind has 1,750 member book dealers (such as Terrace Horticultural Books). As with the American Book Exchange, these dealers maintain catalogs through the Bibliofind web page, which can be accessed through author, title, subject, and keyword searches.

Other dealers of garden books that I have bought from:

Calendula Horticultural Books

(www.localaccess.com/calendula/hort-books.htm)

The Avid Reader of Chapel Hill, NC

(www.avidreader.com)

Moe's Books of Berkeley, CA (www.moes-books.com)

W.G. Winter Garden Books (www.mercury.net/~wgewinter/garden.htm)

Powell's Books of Portland (www.powells.com)

—Duane Dietz

GARDENERS' CHOICE

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up-to-date, and have correct spellings. Richard Hartlage, Curator, Miller Garden

FAVORITE GARDEN AUTHOR CATEGORY

For pure reading pleasure and good ideas, I turn to Christopher Lloyd, although George Schenk, Henry Mitchell and Louise Beebe Wilder are other likely choices. Brian Thompson, Systems and Technical Services Librarian, Miller Library

My all-time favorites are the books of Margery Fish. I have read them all nearly every year since 1980 and I always learn something and get re-inspired about growing and learning about plants. Very practical and hands on, with humor and spirit. Her interest is infectious. Doug Bayley, Past-President, NHS

I love looking at the Ken Druse books, and I think that Tony Lord's *Best Borders* deserves more attention for the wonderful photos. Diane Laird

The first garden writer I noticed was Elizabeth Lawrence, *A Southern Garden*, and since I was living in Chapel Hill, NC near her home in Raleigh, the writing chimed with my realities. I love *The Little Bulbs* and *Lob's Wood*. She is swift to comment on what she covets and her writing is completely natural. Mary Robson

The book I read again and again is Russell Page's *Education of a Gardener*. Richard Hartlage


MOST COVETED BOOK CATEGORY

I'm planning to buy two new Timber Press books, one on *Salvias* by Betsy Clebsch and, as soon as it's published, the book on *Geraniums* being co-authored by Robin Parer. Diane Laird

I just bought, and really love, *The Essential Garden Book* by Terence Conran and Dan Pearson. It has lots of contemporary ideas and modern images, not just the same old English garden clichés. Richard Hartlage

The book I currently most covet is *A Photographic Garden History: A Personal Tour Around the Great Gardens of the World* by Roger Phillips, Nicky Foy and Jill Bryan, probably the most opulent in a long list of excellent photo essays produced by Phillips in collaboration with Foy or Martyn Rix. Brian Thompson

And Mary Robson is not hindered by the reality of what has already been written or published; she most wants to own a plant finder written by Dan Hinkley and a book on perennial plant management by Carrie Becker.

A free lance writer, Valerie Easton is library manager at the Elisabeth C. Miller Library, University of Washington, Center for Urban Horticulture. Valerie writes the weekly column "Plant Life" for the *Seattle Times*, Pacific Magazine. 

Like Ferns?

We're looking for volunteer cashiers (we'll train you!) for our Fern Festival co-sponsored by The Hardy Fern Foundation and NHS on Friday, May 29th, and Saturday, May 30. Enjoy the company of other fern lovers and growers while perusing the plants. If interested, call Richard Hartlage at (206) 362-4136 or email him at 104343.561@compuserve.com

GROUND BEETLES— NOT ANOTHER CONDIMENT?

BY RICHARD A. BROWN

“Beetle,” that’s what my father called me. I like to think it was because of my hobby and not personality. I had to wonder, though, when NHS President Diane Laird asked me to write this short piece on Ground Beetles. We’re not talking about macerated arthropods either. Rather, a group of beneficial insects that you would be advised to defend and nurture, for the well-being of your garden, if not for their own sake.

If you work in your garden for any length of time, you’ll likely encounter at least one beetle. That’s because there are lots of them. If you consider all the forms of animal life on this planet, beetles by far outnumber the rest of us. In fact, it is said that insects make up about 60 percent of all the earth’s creatures. There are more beetles than there are plants! There are very few places that don’t host beetles, and they can manifest themselves in the most remarkable expressions of diversity. I guess that’s what drew me to them over 40 years ago. If you allow yourself the freedom, you can even find some that can be said to be beautiful—wonderful colors, shapes and remarkable sizes. I’ve seen some that are substantially larger than my hand with fingers outstretched. But I digress...

Beetles belong to the order Coleoptera of the class *Insecta*. Ground Beetles belong to the third largest family

of beetles, the *Carabidae*, and so are affectionately referred to as Carabids. There are about 150 genera within this family and about 2,000 species in the U.S. (almost 24,000 species worldwide). Carabids are usually found—guess where! You’re right—on the ground!

from which they molt two or three times in order to grow. Finally, when the time is right, they form a pupa from which the adult beetle ultimately emerges.

Adults and larvae of Carabids are omnivorous or predaceous and often feed on dead or dying insects. This is

where the good news comes in. Ground Beetles are considered beneficial because of the insects they feed upon. While they may, on occasion feed on fruit or plant parts, most are carnivorous and feed on caterpillars, cutworms, beetle larvae (I never said they were perfect), or maggots. A few of their larvae are known to be parasitic. Some Ground Beetles have such a thing for fresh caterpillars that they will climb way up into trees and shrubs seeking them. There are reports that even though these little beetles live only a few weeks as an adult, one such caterpillar-eating beetle can consume 400 caterpillars during that brief life span.

There is another group of Carabids, classed within a tribe called *Cydrini*, that are called the snail-eating ground beetles. These little fellows have special mouth-parts adapted to permit feeding on snails through any opening in the snail’s shell.

But before you start getting too friendly with these beetles, remember there’s another group called Stink Beetles (tribe *Psydriini*). These are frequently attracted to lights, but should not be invited indoors. They have the



Ground Beetle
Carabus nemoralis

Ground Beetles eat slug eggs and cutworm larvae. A common beneficial Ground Beetle is a little over an inch long, dark brown or black and nocturnal—they are slow moving by day and fast moving by night. Rocks with depressions to catch rainwater or sprinkler water will provide the moisture they need and loosely-piled rocks, groundcovers or weeds provide the cover they seek.

They are usually more active at night and so can be found by day under rocks, logs, debris and other objects. Like most beetles, the life cycle includes hatching from eggs, passing through youth in the form of a larvae or grub,



ability to produce a very distinctive and highly noticeable odor that is reminiscent of over-ripe cheese and is said

to be nauseating. It gets

even better, for there's another group, called Bombardier Beetles (tribe *Brachinini*). These amazing beetles—and there are about 40 species of them occurring all over North America—have narrow heads and reddish yellow legs. Should you annoy one of these beetles, they will raise their abdomen into the air and fire off a few rounds of a smoke-like gas with a popping sound. The gas is actually an acidic compound and is very irritating, especially to toads. The gas attack usually allows enough of a diversion for the beetle to escape.

So, before you step on that beetle on your drive or walkway, look twice. It might be a Ground Beetle in search of one your garden cutworms or grubs. Then again, it might be one of those Bombardier Beetles that's already had a bad day. In either case, do yourself a favor and leave it alone. You'll be glad you did.

Richard A. Brown is Executive Director of Bloedel Reserve, Past President of NHS, on the Miller Botanic Garden Board and the Miller Charitable Trust Board, the Pacific Horticulture Magazine Board as well as several others.

The Bloedel Reserve web site may be found at

<http://www.bloedelreserve.org/> 

75 GREAT AMERICAN GARDEN BOOKS IN 75 YEARS

(Selected by the American Horticultural Society in observance of its 75th anniversary celebration in 1997. More information regarding these books is available from the Elisabeth C. Miller Horticultural Library. And EVERY book on the list is in the Miller Horticultural Library!)

James Adams
Landscaping With Herbs

Allan M. Armitage
Herbaceous Perennial Plants: A Treatise on Their Identification, Culture & Garden Attributes

Liberty Hyde Bailey
Hortus Third: A Concise Dictionary of Plants Cultivated in the United States and Canada

Liberty Hyde Bailey
The Standard Cyclopedia of Horticulture

Charles E. Beveridge & Paul Rocheleau
Frederick Law Olmsted:
Designing the American Landscape

Fern Marshall Bradley and Barbara Ellis
Rodale's All-New Encyclopedia of Organic Gardening

John E. Bryan
Bulbs

Arthur Edwin Bye
Art into Landscape, Landscape into Art (2nd edition)

Geoffrey B. Charlesworth
The Opinionated Gardener: Random Offshoots from an Alpine Garden

Thomas D. Church
Gardens Are for People: How to Plan for Outdoor Living (3rd edition)

Ruth Rogers Clausen and Nicholas Ekstrom
Perennials for American Gardens

Gordon Courtright
Trees and Shrubs for Temperate Climates (3rd edition)

Rosalind Creasy
The Complete Book of Edible Landscaping

James Underwood Crockett
Crockett's Victory Garden

Thalassa Cruso
Making Things Grow: A Practical Guide for the Indoor Gardener (reprint edition)

John V. Dennis
The Wildlife Gardener

Michael Dirr
Manual of Woody Landscape Plants (4th edition)

Ken Druse
The Natural Garden

Dumbarton Oaks Colloquium
Beatrice Jones Farrand: *Fifty Years of American Landscape Architecture*

Virginie F. Elbert and George Elbert
Foliage Plants for Decorating Indoors: Plants, Design, and Maintenance for Homes, Offices, and Interior Gardens

Thomas H. Everett
The New York Botanical Garden Illustrated Encyclopedia of Horticulture

David Fairchild
The World Was My Garden: Travels of a Plant Explorer

H. Lincoln Foster
Rock Gardening: A Guide to Growing Alpines and Other Wildflowers in the American Garden

William H. Frederick Jr.
100 Great Garden Plants

Fred C. Galle
Azaleas (enlarged edition)

Alfred Byrd Graf
Exotica Series IV International: Pictorial Cyclopedia of Exotic Plants from Tropical and Near-Tropic Regions (12th edition)

John Greenlee
The Encyclopedia of Ornamental Grasses: How to Grow and Use Over 250 Beautiful and Versatile Plants

Mac K. Griswold And Eleanor Weller
The Golden Age of American Gardens: Proud Owners, Private Estates, 1890-1940

Pamela J. Harper
Designing with Perennials

Continued on page 17 ►

CANDY-STRIPED CANNAS

BY RICHARD W. HARTLAGE

The *Canna*-Banana garden is back! The Victorians were wild about tropical plants and anything with big leaves. As gardening tastes became more "sophisticated," large gaudy plants such as *Cannas* fell out of favor. They have suffered rude comments and until recently been looked very down upon, having an association with trailers and tire planters. The North Carolina highway department took an interest in the genus some years back and planted median strips with thousands of plants. The effect is a little overwhelming to say the least. There are countless varieties to choose from in a range of flower colors from scarlets, crimsons, cherry pinks, salmon pinks, golden yellows and soft creams. There are green and bronze leafed varieties as well. But, several years ago a new series of plants started arriving in the States. Plants with variegated leaves. If you don't like *Cannas* to start with, these new cultivars will add fuel to your fire. They are dramatic and anything but subtle.

Most of these immigrants arrived from South Africa or New Zealand. The first to make a real hit was *Canna* 'Pretoria'. Introduced by John Elsley of Wayside gardens as 'Bengal Tiger', it has quickly become established in haute horticultural circles. I think it is by far the best variegated *Canna*. Strong growing and tall, six to eight feet depending on cultural conditions, with a scream-at-you-presence of acid yellow striped foliage and crayon-box orange flowers that is not for the timid. I tend to use it in containers a great deal—superb as a focal or a real splash on its own. Last summer at the Miller Botanical Garden

in a large stoneware pot we planted *Solanum aviculare* with discs of royal purple flowers, the tawny *Carex*



Canna 'Pretoria'

comans, purple Heliotrope and the leopard spotted *Farfugium japonicum* 'Aureomaculata' (*Ligularia tussilaginea* 'Aureomaculata'). I also used it in a client's garden in Nutley, NJ, planted in an inverted fiberglass asparagus blanching cone. Because the cone is inverted and funnel shaped, it makes a great container in this contemporary garden that need not be hauled in for the winter, as it is frost impermeable. The planter is nestled among a planting of Box-leaved *Euonymus* and is placed at the base of a large wooden sculpture that looks like

an abstracted eagle in flight. The sculpture is dominating and the *Canna* 'Pretoria' is strong enough to compete with it. The *Euonymus* acts to ground the composition with a collar of rich dark green.

New on the scene this last year is the red counterpart to *Canna* 'Pretoria' marketed by Monrovia Nurseries as *C. 'Tropicanna'* and imported from New Zealand where it is known as *C. 'Phaison'*, which also has saturated orange flowers but burgundy leaves with striations of cream, green and pink. It is vigorous and multiplies quickly. I used it in a client's garden to punctuate an annual bedding scheme with a sweep of *Coleus* 'The Line' and orange impatiens. It was a dramatic combination but using any of these *Cannas* could produce nothing but a bold effect.

Canna 'Durban' caused quite a stir several years ago when it was introduced. It sold for \$100 a division. You can now purchase it for substantially less, between \$15 and \$30 depending on how chic your nursery is. Wine red foliage with cream and green stripes, *C. 'Durban'* takes awhile to get going, so don't divide the clumps to single divisions, it does not respond well. Tomato red flowers compliment the foliage color well. I first saw this *Canna* at Atlock Flower farm in Summerset, NJ, where Ken Selody had used it successfully in his red border with *Coleus* 'Big Red', purple Barberry and the tender purple Fountain Grass, *Pennisetum setaceum* 'Purpureum'. The vignette was rich in texture, fire colored and quite pleasing.

A variegated *Canna* that I found

RICHARD HARTLAGE

75 GREAT AMERICAN GARDEN BOOKS IN 75 YEARS

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Jim Harter, editor
The Plant Kingdom Compendium

Lewis Hill
Secrets of Plant Propagation: Starting Your Own Flowers, Vegetables, Fruits, Berries, Shrubs, Trees, and Houseplants

Warren T. Johnson and Howard H. Lyon
Insects That Feed on Trees and Shrubs (2nd edition revised)

Robin Karson
Fletcher Steele: Landscape Architect

Louisa Yeomans King
The Well-Considered Garden (revised edition)

Arthur R. Kruckeberg
Gardening with Native Plants of the Pacific Northwest

Allen Lacy
Home Ground: A Gardener's Miscellany

Elizabeth Lawrence
A Southern Garden (50th anniversary edition)

Ann Leighton
Early American Gardens: "For Meate or Medicine"

Peter Loewer
The Wild Gardener: On Flowers and Foliage for the Natural Border

Ann Lovejoy
The American Mixed Border: Gardens for All Seasons

Laura C. Martin
The Wildflower Meadow Book: A Gardener's Guide

Mildred Esther Mathias, editor
Flowering Plants in the Landscape

John Mickel
Ferns for American Gardens

Henry Mitchell
The Essential Earthman: Henry Mitchell on Gardening

William Olkowski, Sheila Daar, And Helga Olkowski
Common-Sense Pest Control

Eleanor Perenyi
Green Thoughts: A Writer in the Garden

Harry R. Phillips
Growing and Propagating Wild Flowers


Michael Pollan
Second Nature: A Gardener's Education

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looks suspiciously like *C. 'Stuttgart'* and I suspect they are the same. So if you must try this plant I would order from Van Bourgondien.

Cannas are native to the tropical Americas so needless to say they are not hardy. They do not like to be stored bone dry in the winter like dahlias as they will desiccate. At the end of the growing season, usually in mid November or after a hard freeze and the foliage has been killed, I dig the plants out of the ground or the pot and put them in plastic garbage bags. I will then dust the plants with sulfur dust to discourage rot and moisten the mix slightly—I leave plenty of soil around the rhizomes and roots. Be careful not to over-water them. You do not want them to rot or force them into growth. Seal the bags and put them in a cool place—between 40F and 50F is best. Check the bags occasionally; if they are too moist, open them and let them air dry. If too dry, add water. In spring the rhizomes can be divided and potted or planted directly in the ground, depending on your use. During the growing season you will get the best results by planting your *Cannas* in full sun, watering them often and feeding them with an even balanced fertilizer on a regular schedule.

Cannas offer a wide range of possibilities and create lots of drama. They are great in containers, work well mixed in perennial borders and fantastically in annual bedding schemes. Victoriana is back! What's old is new again, though slightly updated.

Richard Hartlage is Director of the E. C. Miller Botanical Garden, writes, photographs and lectures on gardening topics locally and nationally. 

and Plant Delights Nursery named and introduced is *C. 'Pink Sunburst'*, though I have since seen the same plant in Southern California named *C. 'Technicolor'*. I received a Sunday-supplement-like catalog from a South African bulb grower, and at the bottom of the list was a description that advertised a dwarf, pink flowering, variegated leaved *Canna*. I ordered it thinking it would probably turn out to be 'Durban'. It wasn't. *C. 'Pink Sunburst'* is a vigorous grower where the summers are hot. I have found it considerably slower in the Pacific Northwest. It is the only dwarf variegated *Canna*, to three feet, with foliage similar to *C. 'Durban'*. Leaves have a base color of reddish pink overlaid with cream and green stripes with salmon pink flowers. It is one of my top three picks, excellent for container plantings but will work well in any bedding scheme.

An old though rare variety that I have known for fifteen years or more (but know nothing about its history) is *Canna 'Minerva'*, also seen listed as 'Nirvana' or 'Striped Beauty'. It is smaller growing than *C. 'Pretoria'* and doesn't have quite the visual punch with softer yellow and white variegation on a green background, red flower buds and butter yellow flowers. A real departure from the above-mentioned is *C. 'Stuttgart'*: expensive, \$100, and a real dog. Wide wedges of white variegation sounds great BUT the pristine white marking turns to dead and dirty brown whether you grow it in the sun or shade, as I did, thinking I would outsmart friends who were growing it. I recently learned that you can grow *C. 'Stuttgart'* as an aquatic and it will not burn. *Canna 'Striata'* is listed in the Van Bourgondien catalog with a list price \$6.95 for two, it

TROPICALS IN CONTAINERS —NO MANURE!!

BY HENRY DONSELMAN PH.D.

Hey tropical plant lovers, avoid mixing compost into container soils for your tropicals! Maybe it is okay for that aggressive *Ficus benjamina*, but not for palms, gingers, or other monocots. And don't even think of top-dressing the containers with compost. Use a good slow release 3:1:3 ratio (12-4-12) fertilizer like Osmocote (Scott's) and your plants will flourish!

I avoid soil mixes with compost in them since these materials can create a "super cation exchange capacity" that ties

up macro and micronutrients.

Manganese (Mn) is affected the most (always distorts the new growth), iron (Fe) is next, especially if the soil is too wet or poorly drained. Copper (Cu) and zinc (Zn) are next—but even K (potassium) can be affected! The "super cation exchange" of compost holds on to these nutrients so strongly that they become unavailable to your tropicals!

Container soils are pretty easy to put together on a large nursery scale - but for the homeowner it is easier to go to your local "Home Depot" or other garden store and buy a bag of pre-mixed container soil! I like container soils that are roughly 1/3 Canadian Peat, 1/3 coarse sand or wood shavings, and 1/3 perlite. To this I add 1/4 lb. of dolomite (for Mg) per 10 lb. bag of potting mix

and 1 teaspoon of a micronutrient mix like Peter's Soluable Trace Element Mix. Of course I modify this if I am growing more xeric plants like cycads or cactus (Check the bag to make sure the dolomite and micronutrients haven't already been added).

The most important thing to remember in container production is aeration and drainage - if that is taken care of you can grow anything! I like to make container production "goof proof," that is, as long as I never let the plant completely dry out it will survive. All I have to do is water regularly and fertilize with a good slow release fertilizer at regular intervals.

Remember that my research has been with subtropical and tropical palms, heliconias, gingers, etc., and these are

SEASONINGS

BY TED MARSTON

My love affair with roses began long ago. Who could fail to be captured by the bright colors, perfectly shaped flowers and enticing fragrances? Or the images of romance or perfidy which have grown to be associated with different colors?

It was roses which brought me to Washington a little over 30 years ago...something over 100,000 bushes of them producing cut flowers for florists. After 5 years of cutting thousands of them a day (with attendant continuing scratches on hands and wrists), I lost for awhile the affection I once had.

Along with a batch of test roses for my home garden from Jackson & Perkins one year was a knockout named 'Brandy', a hybrid tea with glowing copper flowers and a heavy, heady scent. It was not an outstanding grower tending toward skinny breaks and not too many

of them. It's still on the market. Last year, I spotted one at Molbak's and carried it nearly to the checkout counter, then took it back. I regret that and will probably look for it again this spring.

My appetite has been whetted anew by the wondrous variety of roses, both old and new, which have now become easily accessible. Now there are varieties for every garden use, not just hybrid teas and grandifloras and floribundas marching like soldiers through the landscape. I'm slowly adding to the selection. There's a very old 'New Dawn' clambering over a lattice just outside my office. *Rosa glauca*, that lovely arching bush with smoky gray foliage, purple and bright red hips, has become one of my favorites.

Last spring, I bid on, and won, a collection of 5 hybrid teas at the NHS auction to benefit the Miller Library at the Center for Urban Horticulture (this year it's on Sunday, May 3). Although the collection is lovely, the jury is still out, for by summer's end blackspot had deci-

mated the foliage. I've admired the English roses bred by David Austin, and have so far added 'Graham Thomas', partially because its named for the venerable plantsman, but mostly because of its wondrous yellow color and sweet scent. Most of these new English roses have the flower forms of Old Garden Roses but are blessed with repeat bloom unlike most of the heirloom varieties. (Jackson & Perkins is offering a new Austin rose named 'Pat Austin', the result of a cross between 'Graham Thomas' and 'Abraham Darby'). Most enticing to me, beyond the probability that it's a very good one because the breeder named it for his wife, is the brilliant coppery color, reminiscent of the aforementioned 'Brandy' I like so well.

I'm opening up a new section of garden and you can be sure that roses will be a part of the program. There just may be a place for 'Kiftsgate', that may grow as much as 30-40 feet up through tree. There are rugosas and moss roses and lots of heritage varieties available ➤

the wonderful plants that get "indigestion" from almost any kind of compost (cow manure included). This has a lot to do with where these plants are native - they really never had to work too hard to get micronutrients. I guess in human terms they are "spoiled," and anything that ties up micronutrients affects their growth! Aggressive plants (Ficus, etc.) are an exception! Like squeaky people—they usually get their way (and their food)!

Dr. Henry Donselman is recognized as one of the leading palm authorities in the world and has been instrumental in breeding many of the popular tissue-cultured indoor plants that are available today. 🌴

now in garden centers. Breeders of miniature roses have been working overtime, too, so there is now a good selection, especially useful for planting in containers.

My personal main criterion for roses is that they be virtually maintenance free. I don't want to be spraying them every week. The burgeoning selection makes this easier every year. A little research will help you decide.

There is a wealth of information on roses, book after book in the Miller Library when you go scouting. And there are many places to look at roses. The perennial border at the Bellevue Botanical Garden has some very nice ones interplanted throughout. At Woodland Park, next to the zoo, is a more formal rose garden, mostly planted with a good choice of modern hybrid teas, grandifloras and floribundas.

Ted Marston is a Northwest horticultural writer and a regular contributor to garden magazines. 🌱

75 GREAT AMERICAN GARDEN BOOKS IN 75 YEARS

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Janet Meakin Poor, editor.
Garden Club of America
Plants That Merit Attention,
Volume I: Trees

Tom Pritchard
Flowers Rediscovered: New Ideas for Using and Enjoying Flowers

Rob Proctor
Annuals: Yearly Classics for the Contemporary Garden

Alfred Rehder
Manual of Cultivated Trees and Shrubs Hardy in North America (2nd edition)

Harold William Rickett
Wild Flowers of the United States

Homer E. Salley and Harold E. Greer
Rhododendron Hybrids: A Guide to Their Origins, Including Selected, Named Forms of Rhododendron Species (2nd edition)

George Schenk
The Complete Shade Gardener (2nd edition)

Marina Schinz And Susan Littlefield
Visions of Paradise: Themes and Variations on the Garden

Wayne A. Sinclair, Howard H. Lyon, and Warren T. Johnson
Diseases of Trees and Shrubs

Stephen A. Sponberg
A Reunion of Trees: The Discovery of Exotic Plants and Their Introduction into North American and European Landscapes

Lauren Springer
The Undaunted Garden: Planting for Weather-Resilient Beauty

Sara B. Stein
Noah's Garden: Restoring the Ecology of Our Own Back Yards

Ruth Stout
Gardening Without Work

David C. Streatfield
California Gardens: Creating A New Eden

The Editors Of Sunset Magazine
Sunset Western Garden Book

Roger B. Swain
The Practical Gardener: A Guide to Breaking New Ground

Celia Thaxter
An Island Garden (reprint)

Kim E. Tripp and J. C. Raulston
The Year in Trees: Superb Woody Plants for Four-Season Gardens

James van Sweden and Wolfgang Oehme
Gardening With Water: How James van Sweden and Wolfgang Oehme Build and Plant Fountains, Swimming Pools, Lily Pools, Ponds, and Water Edges

J. D. Vertrees
Japanese Maples (2nd edition)

Sally Wasowski and Andy Wasowski
Native Gardens for Dry Climates

Katharine S. White
Onward and Upward in the Garden

Louise Beebe Wilder
Color in My Garden: An American Gardener's Palette (reprint edition)

Elizabeth Wilkinson and Marjorie Henderson, Editors
Decorating Eden: A Comprehensive Source Book of Classic Garden Details

Ernest H. Wilson
Aristocrats of the Garden

Wayne Winterrowd
Annals For Connoisseurs: Classics and Novelties from Abelmoschus to Zinnia

Donald Wyman
Wyman's Gardening Encyclopedia (2nd edition)

INDISPENSABLE DIRECTORIES

Barbara J. Barton
Gardening by Mail: A Source Book (4th edition)

Richard T. Issacson, editor
Andersen Horticultural Library's Source List of Plants and Seeds: A Completely Revised Listing Of 1993-96 Catalogues (4th edition)

Kent Whealy
The Garden Seed Inventory: An Inventory of Seed Catalogs Listing All Non-Hybrid Vegetable Seeds Still Available in the United States and Canada (4th edition)

PRESIDENT'S MESSAGE

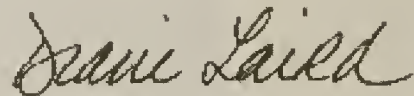
Take the plants away from gardeners, plant lovers and plantmaniacs and you are left with what? Piles and piles of gardening books! And how many do we think we need? The librarians at the Miller Library have, by their own admission, over 8,000 books and they still need more. We agree, and so this issue of Garden Notes is dedicated to the Third Annual Library Fundraising Auction, to the Miller Horticultural Library and to gardening books in general. To be certain you didn't miss any good titles, we've listed the 75 greatest in 75 years. We want to be helpful.

Even though this is the first issue of Garden Notes that had to be delivered to your door by forklift, we have a few notes that didn't fit into the preceding pages:

Early Warning: NHS and Heronswood Nursery are co-sponsoring the Great Gardens' Gardeners Symposium in July; the details are on the calendar in the center of this newsletter. On the Friday before the Symposium, the nursery and garden are open only to those registered for the symposium. Symposium attendees are also invited to a wine reception with the symposium speakers in the private gardens at Heronswood which are no longer open to the public. This will be at no additional cost, but there is room for only 100 guests; so register for the symposium early.

A Gem: Many of you have told me that you joined NHS to learn more about gardening, and we're planning seminars in the upcoming year to cover "the basics." In the meantime, there is a wonderful book recently revised, expanded and republished by Seattle Tilth entitled **The Maritime Northwest Garden Guide**. It's excellent and filled with wisdom and humor, a lot for only \$10. To use their own words, "This guide provides information for beginners to get a jump on learning about growing crops in the Maritime Northwest and serves as a reference for experienced gardeners."

So long, farewell, auf Wiedersehen, adieu . . . Heidi: A thank you to Heidi Schifflet from me and Past Presidents Dick Brown and Doug Bayley and from the boards and members she served as the NHS secretary since 1994. Heidi is going to work full time at the Woodland Park Zoo and takes with her our warm thoughts and best wishes for success.



Diane S. Laird

*Garden*NOTES

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