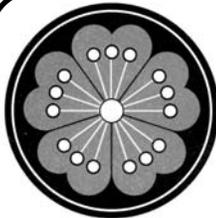


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**MASTER
GARDENER**

Dates to Remember:

- | | | |
|------------------|-----------------------------|--|
| June 13 | 7 to 9:30 p.m. | Monthly Foundation Meeting
Pat Nelson's, 5498 Northwest Drive |
| June 7 | 8:30 a.m. to 5:30 p.m. | Bus trip to VanDusen Flower Show |
| June 26 | 6:15 a.m. to 5:30 p.m. | Bus trip to Bloedel Reserve & Heronswood
Meet at REI parking lot |
| Wednesdays | 8 to 9 a.m. | Master Gardener breakfasts
Babe's in Ferndale |
| Wed. & Sat. | 9 a.m. to noon | Hovander Work Parties |

Weeder's Digest

All the dirt that's fit to print



Newsletter of the Whatcom County Master Gardeners

May 2002

I have received information that Dick Steele has gone home from the Hospital. Boy! That was a long and tough session for Dick. I hope he is well on the road to recovery.

The plant sale was a success as usual, and even the weather cooperated – It was a great day! Thanks to Christine Michaelis for her marvelous organizing skills, and all the volunteers who worked to make it a success.

We have had our last class of the 2002 class, which was the annual walk-about for plant, insect and disease identification. We were lucky that the weather cooperated for at least the morning we took our walk. It was an enjoyable day.

The coordinators for the various up-coming events are actively enlisting volunteers, so please help them out. Their job is not easy, so any thing you can do will be appreciated.

Please note that there is two bus trips on the schedule for June, both of which are going to be very interesting, so take advantage if you can.

Lets hope the ground warms up so some of our seeds will germinate soon – good gardening.

Al McHenry

Plant Sale

~Christine Michaelis

Many, many thanks to everyone who contributed so much time and energy to the annual Plant Sale. The weather was splendid and we sold a lot of plants!

A special note of thanks to Diane Rapoza, Becky Falacy and Teri Booth for their help with the organizational details and stepping forward with willingness to organize the Sale next year. You'll do a great job!

A sale this size truly could not occur without the help of Dennis Connor at Hovander and the work crew. Thanks guys!

Where do I start to thank the rest of you.... so many hours before the Sale, during the Sale and after the Sale. You know who you are and thanks a bunch!

I was pleased the Monday morning after the Plant Sale to present Dick Steel with the most up-to-date total income from the Sale. He and the Greenhouse Gang did a fine job of growing beautiful plants last winter. Thanks for your diligence with the Greenhouse Project.

Now the info you all have been waiting forBill Baldwin's impeccable accounting suggests at this point an income of about— \$7,750.00 from our annual Master Gardener Plant Sale! When an event is this enjoyable, informative and lucrative - you know something is right.

Thanks again to all.



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Newsletter

Deadline:

Third Wednesday of every month.

Tis the Season



By Faye Agner

removing spent blooms, you must take care as the new buds for next season's flowers are directly under the dead flowers.

Remember the old saying, "April showers bring May flowers for June brides"? This year they also brought cold night temperatures that have slowed the growth of many plants and made it difficult to know when to put out your carefully nurtured seedlings. This is also called 'dead heading'.

Tomato plants in particular are sensitive to cold. The traditional date to set out tomato plants is Mother's Day. This year it has been too cold. In cold soil, the tomato roots will stop growing. The cold nights have made for a late start of many plants.

Most of the rhododendrons will finish their blooming this month; it is best if you can find time or a small person's help to pick the spent blooms. When

Weed control is a never-ending chore. Once a weed has sprouted, the sooner you catch it, the easier it will be to remove. Tender, young seedlings can be removed quickly and efficiently with simple hoeing. It'll slice them off just below the soil's surface so they can't regrow. Hoeing at a shallow angle won't bring many more seeds to the surface, ready to sprout. Keep the hoe almost parallel to the soil to avoid exposing more weed seeds.

Many spring-flowering shrubs and perennials should be pruned soon after the flowering is finished. Take care to keep the natural shape of the shrub. Most coniferous and small-leaf hedges may be sheared, but laurel, holly and other large-leaf hedges should be pruned instead of shearing, each branch being cut back as necessary without slicing through individual leaves. Flowering trees should be pruned sparingly; keep in mind, they need a lot less pruning than fruit bearing trees. Summer pruning of fruit trees should not be necessary except to take out the suckers that are sprouting up from the base of the tree.

Most everything needs fertilizer in the Northwest gardens by the end of June or early July. Lawns need their early summer-application of nitrogen to carry them through the usual dry months ahead. If you didn't fertilize your rhododendrons this spring, then now is the last chance for this year. Remember rhododendrons and azaleas and most all other plants should not be fertilized after July 15. Fertilizer promotes new growth in the fall, which will not be hardy enough for our winters.

As the weather warms and the nights are no longer in the 40s, but in the 60s, many of your houseplants may be moved out of doors. They also need fertilization. A water-soluble houseplant fertilizer full strength is called for to meet the plants summer needs.

It is not too soon to begin planning your fall and winter garden. Plantings of cauliflower and other members of the cabbage family can be planted now. Winter endive should be seeded after the passing of the longest daylight of the year. Leeks also fall into this category.

Lawn mowing is with most of us, like it or not. Make it an art. Look for opportunities to use your mower to add design elements to your yard. It might be a stretch to consider your mower a paintbrush, but it can be used to create patterns by varying the direction of the cut. This works well with fescues. You can see the results of this type of mowing on sports fields. Experiment with different patterns at home by mowing alternately in different directions. Long, even stripes tend to lengthen the lawn whereas a checkerboard pattern makes the area look smaller. Experiment and don't be afraid to change the pattern. Also, a change in the mowing pattern is good for the lawn.

Want a safe and sane method of pest management; adopt a toad. If you don't already have toads in your garden, you can adopt them from another location. As long as a toad has shelter, moisture and food, it could stay for years. Toads feed mainly at night and need shelter and moisture during the heat of the day. They take cover by burying themselves in damp mulch or hiding beneath low growing plants. You can make a shelter for them by setting broken flowerpots below shrubs in a shady spot. Break a hole around the rim of the pot to provide an entrance at least 2 inches wide and 1 ½ inches tall. In late fall, toads burrow 3 feet below the soil's surface to hibernate until spring. To cool off, toads can drink through their skin. Set a saucer of water level with the ground so a toad can jump into it. Make sure to keep it filled on hot days. Toads feed by patiently lying in wait. Toads use their long, sticky tongues to quickly grab their food. Anything that is smaller and slower moving than they are is fair game. Even as tadpoles, toads eat mosquito larva in the water. Toads feed mainly on insects, so it is wise not to use pesticides.

Using Compost As A Soil Amendment:

If your soil lacks organic material, is compacted or doesn't retain water, compost makes a great amendment. Different soil types will need different applications of compost to create the same increase in organic matter in the final mix. For example, since sand is heavier than clay, the approximate amount of organic amendment required to increase the organic content of 5,000 sq. ft. of soils at a depth of 6" for a clay loam would be 9.5 cubic yards of compost—for a sandy soil much more is needed, about 14.5 cubic yards.

For your backyard vegetable garden, compost application rates are often measured in inches. For example, if your garden is 100 sq ft., and you wanted to incorporate a one-inch layer of compost, you would need 8 cubic feet of compost. One and one half five gallon buckets equals approximately one cubic foot, so you would need 12 buckets of compost. Some gardeners buy compost in bulk by the "yard". There are 27 cubic feet in one yard of compost. You can see why gardeners are always looking for more compost!

Compost can also make excellent mulch. Different kinds of compost are better for different types of vegetation, and application rates differ for various uses. For example, for established shrubs and trees you would want coarser, fluffier more woody compost, which would not have to be as finely composted. For your vegetable garden, you would want a finer material. Here are some suggestions:

- **Top Dressing for lawns:** ¼" thick. Compost should be fine. It can be sifted through a ½" screen. Apply after aerating or re-seeding, then water.
- **Annuals and Perennials:** 1 – 2" thick. You want to avoid applying too thickly in the fall, as it could promote diseases and rodent activity.
- **Trees and Shrubs:** 1-3" thick. Coarse compost is best. Be sure to keep mulch at least 3-6" from the trunks to avoid fungal diseases and rodent damage
- **Erosion Control:** 2 – 4" thick. Coarse compost is best. Put 2-4 " over any area without cover. Put 3-4" on slopes.

There are certain plants that are sensitive to over mulching. Take care to mulch lightly when mulching these plant families: azaleas, rhododendrons, dogwoods, mountain laurels, hollies, cherry trees, lindens, and spruces.

Calling all bug collectors

Continued from page 6

- Take note of sampling technique or collection method. Trapped at light. Pit-fall trap. Hand collected.
- Take note of killing method and preservation. Boiled in H₂O, Isopropyl alcohol, vinegar...

We have the supplies, the know-how and space for an insect collection; we just need the bugs, labels and preparation! The effort now will pay off for years and years. The season is prime and we have plenty of time to collect! If you would like to contribute to the collection this year please go outside and yell "I want to collect bugs!" or contact me and your fellow Master Gardeners:

Todd Murray 360/676-6736 (tamurray@coopext.cahe.wsu.edu)



**MASTER
GARDENER**

Weeder's Digest is the monthly newsletter for the Whatcom County Master Gardener Program. Guest articles are encouraged. Please submit typewritten articles by the third Wednesday of each month to Karri at the Master Gardener Office. Articles can also be submitted by e-mail to: karrimac@coopext.cahe.wsu.edu. Editor uses MS Word for Windows and PageMaker 6.5. Any articles prepared on other programs or platforms should be saved as Text Files or Rich Text Files. Editor reserves the right to edit for space considerations, grammar, spelling and syntax.

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WHATCOM COUNTY

Master Gardener Office:
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Bellingham, WA 98225 360/676-6736


Craig MacConnell
Horticulture Agent

Calling All Bug Collectors!

Your office is in dire need of a good, comprehensive bug collection. The collection offers the same benefits as your wonderfully prepared weed collection in the office, INSTANT identification! Correct identification is the first step in proper pest diagnosis. We have new Master Gardeners that have graciously revealed their 'buggy' side and have already begun to produce insect specimens for the collection.

Why waste my time collecting insects, Todd?

- Personal Expertise! Collecting insects is the only way to become familiar with the diversity out there. Through your collections, you will become familiar with insect phenology (the when and where of insect development). You will become familiar with insect habitats and behaviors. Most importantly, you will become an expert in insect identification!
- Your efforts will provide a voucher collection for the 'bug-impaired' or squeamish MG's. Master Gardeners 100 years in the future will be able to use your collection to identify insects. A reference collection will increase the MG's accuracy and speed of diagnosing insect samples that come into the office.
- The insect collection also serves as an excellent educational tool for the public. People love to see the bugs that occur around their yard. The collections can be used at clinics and fairs.
- Finally, we don't know what's out there. On average, with limited collectors, we have discovered 1.5 insect species per year in Bellingham that were not known to Whatcom County, Washington State, the United States, or even North America! Your name could go into the history books.

Guidelines and Highlights of Insect Killing, Preserving and Collecting (also see one of your MG resources: Discovering the Insect World EB 1511. <http://cru.cahe.wsu.edu/CEPublications/eb1511/eb1511.pdf>)

- **Hard-bodied insects** (they would crunch if you step on them) should be placed into a sealed canister and into your freezer (or the one in the MG office). Freezing insects is an excellent way to kill and keep specimens hydrated. You do not need to buy killing jars (these can be dangerous and you need to pin them immediately). Keep the specimens frozen until you can pin them or bring them in for pinning. Do not keep them in the freezer for extended periods of time (they will get freezer burnt and are useless). Do not let the specimens go dry; it is a difficult process to re-hydrate a bone-dry specimen.
- Place **soft-bodied insects** (insects that squish like aphids, maggots, caterpillars and other immature insects) into isopropyl alcohol (rubbing alcohol) or vinegar. Large soft-bodied insects (such as big caterpillars) should be fixed in boiling water. Bring the water to a boil, then remove from the heat and let sit for a few moments until the water is not violent. Throw the specimens into the water, the surface tension usually keeps them afloat. Fish out the insects and place into an airtight vial with alcohol. NOTE: Keep alcohol away from your boiling area.
- If you collect immature insects (especially ones with complete metamorphosis) like caterpillars; kill and preserve only a few. Leave the others to complete their life cycle to adulthood. Check the site regularly and collect each stage (pupae and adult too). Or try and raise the insects yourself by placing them in a cage and feeding them host material. Techniques to do this are in the hand out. This is extremely important because many insects are unidentifiable with out the adult stage or even with out both males and females. Additionally, you may be very surprised of what else might pop out! This is a great way to find parasitoids (most important beneficials and my favorite bugs).
- Finally and MOST IMPORTANTLY, keep records of each specimen collected. An insect collected with out a label is senseless slaughter of a living thing because it is useless to anyone. Do not neglect this responsibility. Always label your bugs and always have a pen and paper handy. You NEED to take the following information:
- Take note of the location that you have collected the specimen. State, County, City, Street Address, or significant landmark such as Cornwall Park.
- Take note of the habitat/host or any biologically significant association. Like collected from raspberry. Or collected on edge of tidal pool. Or collected from dead log. Or reared from cherry leaves....



President's Message



Pat Nelson,
MGF President

June—the month that brings us to the end of Spring, the beginning of Summer and lots of color in our gardens!! I don't know about your garden, but mine still says May. I hope that by June 13 when I have the meeting in my garden, that there will some color!!

Plant Sale 2002 has come and gone! A lot of new class members and veterans worked long hard hours—but when May 11, 9 a.m. came, the ropes were dropped and the raucous crowds of plant addicts rushed in—somehow it was all worth it!! This very impressive, well organized event brings out the serious gardeners who look forward to this sale because it offers quality products and knowledgeable advice!! A huge thank you to Christine Michaelis for making these last few sales so successful—and to all those who helped. Next year will be different—new chairpersons, Becky Falacy and Dianne Rapoza. We will

have no greenhouse which will spread the work out to us members to produce those quality products—so be prepared!!

Graduation/potluck is set for November 7. We are stressing that this celebration is not just for the new class—there will be special awards for veterans and an interesting program—so be there!!

The Foundation has entered the 'Whatcom in Bloom' competition again. Last year we took 2 first place awards!! Can we continue to excel?? We will see!!

Karen Gilliam says that there are still a few openings for our upcoming trips—VanDusen on June 7 and Heronswood/Bloedel Reserve on June 26. Call Karen at (360)384-4562 for info.

At our May meeting Teri Booth told us of a group of new members that have started a garden work exchange program where they meet weekly at a members home and do three hours of yard work. It's amazing how much you can get done without it seeming like work when you are surrounded by friends! Good idea!

We enjoyed Tom Burton's talk on bamboo—he enjoys it so much and it shows. His enthusiasm is contagious. Next month, our meeting is in my garden at 5498 Northwest Drive, halfway between Smith and Axton Rd.—watch for balloons. Hope to see you here!!

Upcoming Garden Trip

~Chris Hurst

The Master Gardener Foundation has reserved a bus for July 26. The trip will include two private gardens. One is called Crescent Moon and has hundreds of roses and perennials. The other is called Frogg Well and has a very unique house and garden. Both are on several acres of land. Two nurseries are also included that both have very large nice demonstration gardens on sight. One is called Rose Hip Nursery, the other is the Hummingbird Farm.

The cost for master gardeners is \$12.00. The cost for guests(non-master gardeners) is \$17.00. For more information please contact me at (360)366-5501.

The Snowbells

Family: Styracaceae
(Storax family)

Genus: *Styrax*

Species: *americana*,
japonica, *officinalis*

Perhaps you remember last month's mention of Alexander Garden, the Scots physician and botanist who transplanted himself to what was then known as Charles Town, South Carolina. He forwarded many dried and living specimens as well as field notes to Carolus Linnaeus in Sweden, who had set about cataloguing plants, classifying them, and devising the system of nomenclature that today helps us make sense of it all.



Dr. Garden was repeatedly frustrated with Linnaeus' reluctance to accept the premise that the plants in what was then the new world did in fact represent completely different genera and species from those found elsewhere. One of Dr. Garden's most persistent cases was made on behalf of the American snowbell, sometimes called the little-leaf snowbell, which today is in fact classified as *Styrax americana*. Its noble name has not protected it, however, from humankind's steady encroachment into its native habitat. What are variously called pitcher plant bogs, moist pine barrens, grass-sedge bogs, or savannas once occupied about 75 percent of the Atlantic and lower Gulf Coast plains, from Virginia to Texas. Today, less than 3 percent of this area remains untouched, and the American snowbell is an endangered plant. Efforts are underway to reclaim it on a state-by-state basis. However, at this point, it is easier to find an American snowbell in east-coast arboretums and botanical gardens than it is to spot one in the wild. It is seldom seen in retail nursery centers, although seeds are available through some

heritage societies. Even references to it are disappearing from the most widely used garden books. If you did find an American snowbell, it would adapt to our Northwest climate, although it would ask for ample and consistent moisture and protection from the wind. It would reach a height of ten feet, and tend to shrubbiness. Most of the members of the *Styrax* genus are suited for their historical place as residents of the understory. They're used to something else buffering them from the effects of a harsh climate.

While other snowbells are more readily available to the home gardener, as a class these lovely shrubs and trees are singularly underused. That's a shame, since they can be wonderful additions to the landscape. *Styrax japonica*, the so-called Japanese snowbell (even though it's native to China), is a very desirable, small deciduous tree, reaching a height of ten feet in ten years. Older trees may grow to twenty feet, so plan accordingly. Birds and gardeners who have discovered *S. japonica* tend to be smitten with it, as is the Royal Horticultural Society, which has given it an Award of Merit. It has a lovely form, attractive foliage, and small but very beautiful and slightly fragrant white blossoms that dangle from its branches in May and June. The flowers help bridge the gap in the garden between the spring bloomers and the flowers of summer. The *Styrax* show is extended by the appearance of an abundance of little white fruits that dance below the branches. *S. japonica* 'Pink Chimes' has pink flowers, if you prefer that shade, and *S. japonica* 'Carillon' offers a weeping form and white flowers. Garden designers recommend placing your *S. japonica* where you can look up into it and appreciate the show. There is some fall color, although it is not dramatic. But the flat-topped form and horizontal branches that characterize *Styrax* add a pleasing presence to the winter landscape.

Styrax trees and shrubs appreciate neutral to acid soil; a sheltered location, in sun to part shade; regular but not overly abundant moisture; and sensible site preparation and general care. They are not bothered by any particular pests, although when stressed by their conditions, they can become susceptible to stem borers and leaf-chewers. Any damage is easily controlled and is not likely to affect the tree's lifespan.

If you're committed to water conservation during our dry summers, you might consider seeking out a *Styrax officinalis*, which has the distinction of being what is perhaps the only species that is native to both California and Europe. Can't you just hear Linnaeus saying, "So there, Dr. Garden!?" *S. officinalis* actually prefers a dry-summer climate. It tends to a shrub form, and its flowers are abundant and very fragrant. Its seeds are reputed to make fine Rosary beads and its sap is used in some areas as incense.

There's bound to be a particular *Styrax* that meets your needs and suits your own personal garden style. Whatever controversies may have surrounded its naming and designation, they pale before its beauty. The lovely members of this genus delight all gardeners, whether they pursue their horticultural passions in the new world or the old.

Garden Friends and Foes By Todd Murray

Pest Alert: Move over Crane Fly; the European Chafer is coming!

European Chafer/White Grubs

Order: Coleoptera
(Beetles)

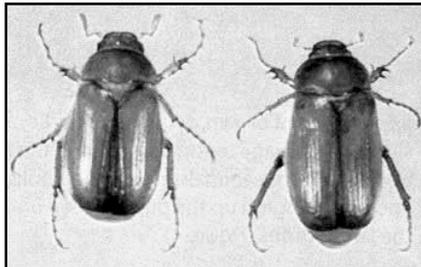
Family: Scarabaeidae
(Dung Beetles)

Species: *Rhizotrogus majalis*

Master Gardeners are a first line of defense for detecting new pests in our area. Your fellow B.C. Master Gardener found white grubs infesting a New Westminster lawn last November 2001. This was reported in their newsletter, alerting Al McHenry to pass this information on to the Washington State Department of Agriculture. Now the WSDA is combing Whatcom County for signs of European Chafer. We might not have it yet, but it is a definite threat to Whatcom County lawns and agricultural crops. So, "good job" to the Master Gardeners that brought this pest to the forefront. The sooner that we detect this pest, the better we can manage it.

The European chafer was introduced to the US in the 1920's on the East Coast. States that are currently infested with European Chafer include the North Eastern US extending to Michigan State. As in Europe, this pest is a serious problem in turf and cereal crops in the U.S.

Description and History Life



The adults of the European Chafer are small, brick colored brown to light brown/tan beetles. They have that typical oval, June beetle shape and are about 1/2 inch long. Adult beetles emerge in mid-June and will be present through July and possibly August in our area. During the evening, the beetles swarm at dusk. These "swarms" can be rather noisy, sounding much like buzzing bees. Beetles mate as darkness sets in and females will seek ovipositional sites in the soil soon after mating. Eggs are laid singly inside earthen cells. A female will lay 20-30 eggs. Larvae will hatch from the eggs two weeks later and begin to feed on plant roots. The larvae are "C"-shaped, about 3/4 inch long when mature, white with a dark head capsule. They appear much like root weevil larvae but scarabs have three pair

of visible legs and grow larger. Chafers spend the winter as larvae and will pupate in May, emerging as adults 2-3 weeks later in June.

Damage and Management



Larvae are the damaging stage of this pest. Generally, European chafers prefer to feed on cereal plants like turf and wheat. Larvae can feed on just about anything and have been found damaging the fine roots of broadleaf plants and conifers. In turf, larvae feed in the root zone up to the root crowns of turf grass. Heavy infestations cause browning and death of turf, especially as drier months begin. Secondary pests, such as raccoons and skunks will peel back turf to feed on the grubs causing significant damage to lawns. Check out BC Ministries of Agriculture's web site to see extensive damage caused by skunks: <http://www.agf.gov.bc.ca/croplive/cropprot/chafer.htm>

Monitoring for white grubs is very similar to that for crane fly. Visit <http://whatcom.wsu.edu/cranefly> to see how to monitor. The threshold for white grubs is dependant on the health of the turf. Generally, 5 to 10 grubs per square foot should warrant management tactics. Monitoring adult flight should be fairly obvious because of their swarming behavior and the noise they make.



Managing the European Chafer will not be easy. Reports across the country have alluded that this pest tolerates many of our insecticides. The current insecticides that are recommended are very unsavory (if you are a bird or pollinator). If or when we have to look for management practices, you can expect that there will be quite a bit of research involved to find good alternative strategies.

Keep your eye's peeled Master Gardeners. Inspect areas of turf that look marginal, much like you do for crane flies. Pay especially close attention to areas that might be suffering from raccoon or skunk activity. There aren't many grub-like insects in your lawn so if you run across any beetles or grubs, please collect them. You can bring them into the Cooperative Extension office and we will pass them on to Washington State Department of Agriculture.

