



# Seeds for Thought

November 2012

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A newsletter from the  
Master Gardener  
Foundation of  
Washington State

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## From the President

—Chris Bailey, MGFWS President

**A**t the annual meeting in September, I was elected to a two-year term as president. I am excited for the challenge this presents and confident that we will work together to meet the goals before us as we move forward.

It has recently come to my attention that not all Master Gardeners receive our newsletter, because they are not signed up for the state foundation's ListServ. I have asked county foundation leaders to forward this issue to their members. If you are not currently enrolled in the ListServ, I invite you to join by sending an email to [webmaster.mgfws@wsu.edu](mailto:webmaster.mgfws@wsu.edu), asking to be added to the distribution.

I want to assure you, the Master Gardener ListServ is a private roster owned by the WSU Master Gardener Foundation of Washington State for the express purpose of carrying out educational programs by WSU volunteers. The mailing lists of our volunteer programs are not sold, distributed or furnished to any other person, firm, association or the federal government.

At the bottom of every message that goes out over the ListServ, you will find a message that shows you how to unsubscribe.

If you do not have email capability, please talk to your program coordinator or foundation officer about receiving a hard copy of *Seeds for Thought*. ■



Don Bailey

## Thank You, Master Gardeners!

—Tonie Fitzgerald, WSU Extension Master Gardener Program Leader

**A**s we approach the season of giving thanks, I want to offer my thanks to you. In September, I was part of a successful and fun state Master Gardener Advanced-Education Conference, in Pasco, and, a week later, the National Extension Master Gardener Coordinators' Conference (EMGC), in Spokane. Both were great events and made me thrilled and proud to be part of the WSU Master Gardener Program.

The state conference brings to light the many projects Master Gardeners do in their communities to teach residents about growing food, inspiring youth to garden, protecting soil and water resources, choosing the right plants and products for healthy landscapes, participating in community gardens, and, overall, sharing their passion for gardening with so many people. Thank you!

I'm proud and appreciative of the tremendous support that local Master Gardener foundations provide to Extension Master Gardener programs. From purchasing books and supplies for projects to helping with rent and utility payments, foundation fundraising keeps many county Master Gardener programs thriving in ways that Extension offices could not do alone. The creativity and drive that Master Gardener volunteers exhibit in supporting the program's success is amazing. **Thank you! Thank you!**

I'm also very proud of the WSU Master Gardener program coordinators, some of whom are Master Gardener volunteers themselves, who work so hard to coordinate the training and community involvement of Master Gardener volunteers. Twenty-six WSU Master Gardener Coordinators, including volunteer coordinators Claudia Steen, Claudia Matthew, Mary-Jean Grimes, Ann Miller, Barbara Guiland, Kris Nesse and Sarah Fairbank, attended the national EMGC and actively engaged with state and county Master Gardener coordinators from 33 other states, learning about elements of successful volunteer systems. Thank you!

It is a blessing to work with all of you in this wonderful program. Best wishes for a happy, healthy and thankful harvest and holiday season! ■



Coni Vaughn



Tussock Moth Caterpillar  
(*Lophocampa* sp.)  
Nameplate photo by  
Carol Robbins,  
Master Gardener  
Grays Harbor-Pacific Counties

Visit our Web site:  
<http://mastergardener.wsu.edu/mgfws/>



Watch this YouTube  
Invitation to the  
2013 International  
Master Gardener  
Conference

<http://youtu.be/iunAhQqTeUU>

# Conference 2012 a Huge Success

Hosted by Benton-Franklin Counties Master Gardeners



**W**hat do you know about biochar, straw-bale gardening, Facebook, mammoths and bats? Well, these and other topics piqued the interest of Master Gardeners who, in September, attended the 2012 conference in the Tri-Cities. Registration for some of the classes was so large the hosts were forced to reconfigure the classrooms to make room for everyone. The speakers were not only diverse, but extremely knowledgeable in their areas of expertise.

Although education is the primary purpose of our annual conference, there were lots of other activities to entertain and enlighten: tours, the Market Place, the raffle and silent auction and the ever-popular Search for Success displays. And what's better for a gardener than a free plant? Well, two free plants—courtesy of Proven Winners® and Skagit Gardens. We were given a glimpse of the new plant introductions for 2013 by Danielle Ernest, laughed with abandon at the devices Sue Kirby demonstrated to cope with situations we all face, and marveled at the beauty of John Clement's photographs of the northwest drylands. To top it all off, the food was given a big "thumbs up" from the Master Gardeners who attended. ■

—Christine Bailey, MGFWS President



Photos by James Worgull





Great fun was had by all at this year's conference in the Tri-Cities.

## 2012 Media Award

**A**t the WSU Master Gardener Advanced-Education Conference in September, the Master Gardener Foundation of Washington State presented its 2012 Media Award to Burke Harris, a Clark County Master Gardener and owner of Soundtracks, a video-recording studio in Vancouver, Washington.

Members of the Clark County Master Gardener Program praised Mr. Burke for having “unselfishly given of his talents in support of their program” since becoming a Master Gardener in 2008. His first contribution was the production of an innovative DVD that publicized the 2010 WSU Master Gardener Advanced-Education Conference, held in Clark County. Created as a conference marketing tool, Master Gardener programs across the state used the DVD to encourage conference registration.

Because of Burke’s reputation in the recording industry, he was able to work with Clark County Television Network to regularly broadcast the video. He also was part of a coordinated effort to provide regular coverage of the upcoming event to Vancouver-area newspapers.

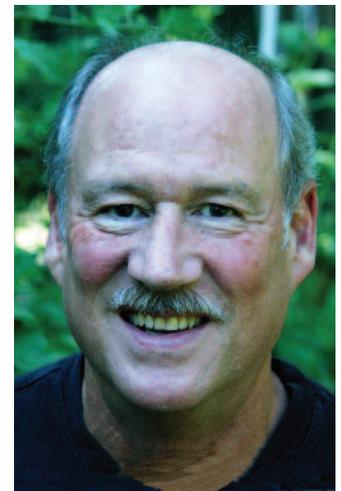
During the conference in Clark County, Burke was on duty long hours to ensure that all conference audio and visual equipment operated without disruption. His diligence resulted in a quality conference experience for both presenters and participants.

Since 2008, Mr. Harris has produced each Clark County “Search for Success” video and audio display at the state Master Gardener conference.

Clark County has developed a website, [www.mgfcc.com](http://www.mgfcc.com), for which Burke has contributed videos of Clark County Master Gardener projects.

Mr. Harris serves on the steering committee for the Growing Groceries Program in Clark County, a project recently transferred to the county’s Master Gardener Program. He is an invaluable part of the program’s new management team. He develops publicity and training materials for garden mentors, prepares publicity for local newspapers and has documented community gardens countywide.

Burke Harris is truly an ambassador for the Master Gardener message in the Clark County community and throughout the state. Burke’s willingness to contribute his talents and skills, while running his own business, exemplifies the Master Gardener spirit. ■



**Burke Harris**  
Clark County

## WINTER STONEFLIES

# Insects with Antifreeze

Reprinted by permission from The Xerces Society, <http://www.xerces.org>.

**A** snowy creek bank teeming with insects? Not exactly what those of us in colder climates would expect to see on a winter day. Because insects are cold-blooded and need warmth in order to function, they typically avoid cold conditions by hibernating (referred to as diapause in insects) or finding shelter. A few, such as green darter dragonflies and monarch butterflies, migrate. Winter stoneflies do the unexpected: they brave the cold.

Winter stoneflies (or snowflies) comprise a large number of species mostly belonging to two families, Taeniopterygidae (winter stoneflies) and Capniidae (small winter stoneflies), in the order Plecoptera. Similar to dragonflies, damselflies, mayflies, and caddisflies, stoneflies spend the bulk of their life as aquatic nymphs. While most aquatic insects develop fastest in warm weather, winter stoneflies do the opposite. As summer approaches and water temperatures rise, the nymphs burrow into the stream bed and become inactive. When conditions cool in late fall and winter, the nymphs return to the water, resume feeding (on detritus), and grow rapidly. Nymphs mature in winter or early spring and exit the frozen river via holes or cracks in the ice. Once out of the water, the stonefly undergoes its final molt into a winter-loving adult.

And what's not to love? Outlandish though it may seem, emerging during the coldest months of the year has its advantages. According to Jonathon Neal, an entomology professor at Purdue University, a huge advantage for winter stoneflies is the reduced number and relative inactivity of predators in mid-winter. With fewer predators to worry about, the conspicuous stoneflies are free to move about and mate with low mortality. Still, winter is not entirely devoid of risk, and a small number of birds, including blue jays, cedar waxwings, and robins, have been documented feeding on winter stoneflies.

The real question is why do these insects not freeze to death? The secret lies in the production of antifreeze compounds such as glycols, sugars, and proteins that disrupt the formation of ice crystals in the insect haemolymph (blood), allowing the body fluids to remain liquid at temperatures several degrees below their freezing point.

Once out of the water, winter stoneflies mill about the snow and ice in search of mates. Male stoneflies attract females by

drumming their rear end against the snow and ice. The vibrations are transmitted through the substrate, and females feel, rather than hear, the male calling. Virgin females will drum in reply, and the two insects will continue to drum until they meet and mate. Shortly after, the female releases her fertilized eggs into the water where they quickly hatch into young nymphs.

Winter stoneflies have very particular water quality requirements, and are among the first animals to disappear from polluted or degraded streams and lakes. As such, they are frequently used as sentinel organisms in biomonitoring. Finding them indicates that a water body is on the clean and healthy side of things, while not finding them, particularly in places where they were once common, can be a cause for concern.

In light of this, the Xerces Society has recently completed status reviews for three seriously imperiled winter stoneflies. The straight stonefly (*Capnia lineata*) and the Idaho stonefly (*C. zukeli*) are known solely from a small network of streams and creeks in northwest Idaho, and both species are threatened by water quality impairment due to large scale logging, agriculture, and cattle grazing in the watershed, as well as thermal and chemical pollution from waste water treatment plant discharges. The Arapahoe snowfly (*C. arapahoe*) lives only in two small streams in northern Colorado. This species is on the brink of extinction due to habitat damage from intensive recreation, livestock grazing, logging, stream de-watering, insecticide applications, runoff from roads and trails, and pollution from residential and resort septic systems. Responding to a petition from the Xerces Society, the U.S. Fish and Wildlife Service recently verified that protection of the Arapahoe snowfly may be warranted and began its own status review, a necessary step for listing under the Endangered Species Act. Listing would result in the protection and restoration of any remaining habitat for this winter stonefly.

So, keep your eyes open when you are on a snowy walk, and you may just find winter stoneflies on the banks of a partially frozen stream. And while you're at it, look out for other unusual insects on the snow, including snow fleas, winter craneflies, and winter-active caddisflies. As the University of Minnesota's Jeffrey Hahn so aptly put it, "There's snow place like home for these insects." ■



# Master Gardener of the Year 2012 Jane Billingham

Skagit County

Master Gardener Foundation of Washington State  
2012 Master Gardener of the Year



The Master Gardener Foundation of Washington State honors Jane Billingham, from Skagit County, as the statewide Master Gardener of the Year for 2012.

The Skagit County Master Gardener Foundation Board nominated Jane Billingham for this distinction because of the inspiration and passion she has instilled in that county's program, creating new educational opportunities for the community and breathing new life into the county's Master Gardener programs.

Jane, a Master Gardener since 2005, has initiated no fewer than ten new community-education gardening programs in her county, of which five have targeted growing foods for the home. Notable among these are the "Eat Your Yard Workshops," "Growing Community Gardens" and the "Know & Grow Workshops," initially a partnership between the Skagit County Master Gardener program and the WSU Mt. Vernon Research Center. Jane also developed the Anacortes Farmers Market Outreach, a partnership among Master Gardeners and three other community organizations to disseminate information at the Farmers Market about gardening, backyard wildlife habitat and growing fruit and vegetables at home.

Jane's initiatives have also focused on children, including her production of a series of laminated 3 x 5-inch insect flash cards to teach children about common "critters" in their gardens and through her helping students to develop a presentation about the rain garden they built on the La Conner School parking lot.

Beyond the La Conner School rain garden, Jane has emphasized rain-garden building elsewhere in Skagit County with, for example, her training this year of Master Gardener interns about the whys and hows of rain gardens and her organization of a quarterly review by Master Gardeners of the David Brookings Rain Garden, located at the offices of the Skagit County Commissioners.

An author of five books, including her latest, *The Armchair Book of Gardens*, Jane's extraordinary communication skills shine through her Master Gardener work. She provides gardening education to the public in person, on the radio, in newspaper articles, and on Facebook. She is a regular contributor to *Seeds for Thought*, the State Master Gardener Foundation newsletter, and she is a frequent presenter at the annual statewide WSU Master Gardener Advanced-Education Conference.

"Jane is a leader in every beautiful and powerful aspect of the word, and the Skagit County Master Gardener program is a more innovative and educational resource because of her," stated Skagit County WSU Master Gardener Program Coordinator Lisa Hervieux in support of Jane's nomination. The Master Gardener Foundation of Washington State unequivocally concurs and celebrates the achievements of Jane Billingham by awarding her the title of 2012 Master Gardener of the Year. ■

## *A Special Thank-You*

The Master Gardener Foundation of Washington State wishes to express gratitude and appreciation to donors from the Washington State Combined Fund Drive for their donations during this quarter.

## Is There News From Your Master Gardener Program?

The *Seeds for Thought* newsletter offers all county WSU Master Gardener programs and foundations an excellent way to publicize your projects and events. Working with your county's representative to the Master Gardener Foundation of Washington State or with a member of your organization's leadership, send articles to Mary Shane, *Seeds for Thought* managing editor, ([meshane@comcast.net](mailto:meshane@comcast.net)) according to the following schedule:

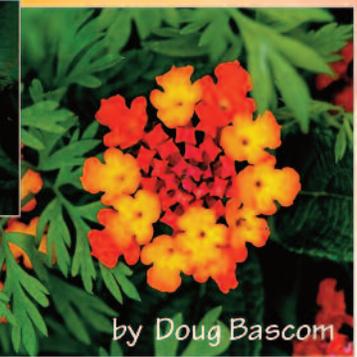
### ARTICLES DUE:

January 1  
April 1  
July 1  
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May 1  
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