

# KC Weed News – December 2007

King County, Washington

<http://dnr.metrokc.gov/Weeds/kcweednews.htm>

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**Weed of the Month: Herb Robert** (*Geranium robertianum*), Class B non-designate noxious weed, (<http://dnr.metrokc.gov/wlr/lands/weeds/robherb.htm>)

When I am gathering weed specimens to take to events and workshops, I never have trouble finding herb Robert. I just have to look around in the pots I have sitting out and there will be new plants volunteering themselves. I don't usually let this plant go to seed in my yard, but somehow it always finds its way into my pots. As others will surely agree, this is the nature of the pesky backyard weed known as Stinky Bob to many of us. Have you ever wondered how this plant gets into so many nooks and crannies? Not only do the seeds get ejected up to 20 feet from the plant, but the seeds also have sticky threads that help them catch a ride on passing ants and snails. The seeds also stick to leaves and get eaten and spread around by animals browsing on the plants and this spreads herb Robert even farther afield. The seeds themselves are very durable and can persist for many years (as anyone can tell you who has thrown these plants in their backyard compost).

This time of year, you will see low-growing rosettes braving the winter, in readiness for spring, when they will quickly grow, flower and go to seed. Waiting in the soil are seeds that will germinate in early spring and then flower and seed later in the summer. Still other plants will germinate after the spring and flower even later in the season, sometimes as late as December. Because of the multiple flowering peaks, you will see plants at many different stages all year long. You will also see flowers from spring into late fall, giving herb Robert many opportunities to shower seeds onto its surroundings.

Annoying as it is in gardens and yards, the alarming thing about herb Robert is what it can do in western Washington forests, even without disturbance or other assistance. My eye-opening experience with this problem came during a volunteer weed pull in the Mt. Baker Snoqualmie Forest up in the Skykomish District. We were taken by the Forest Botanist into a lovely, fairly

remote forest with large evergreens and a rich understory of native wildflowers, ferns and mosses. The nearest road was a long walk away and there was little sign of any disturbance. We thought there was a small, manageable population of herb Robert and so we were going to pull it before it got worse. That day was an important lesson for us all as we tried to find an end to the infestation and we kept finding more and more plants. Even in this shady, undisturbed forest, there were so many herb Robert plants it took us hours to make any progress at all. In the end, discouraged, we gave up pulling all the plants and just tried to get the big ones that might flower soon. Clearly, this forest had been invaded and it was no longer possible to extricate this plant from the forest community. Sadly, this is the case with a lot of forests in the Skykomish area as well as the forests closer to home in the Issaquah Alps and the North Bend district. So far it seems to be limited to 4000 feet and below, but it is able to occupy a wide range of habitats, from highly disturbed to almost pristine. Even though it seems that this plant is “everywhere”, there is still plenty of natural forest that is not infested with herb Robert in our region. In places where this plant is still limited to trail edges, it would be a very good deed to remove it now before it moves farther into the woods.

Herb Robert is a Class B weed in Washington, but it is not designated for control in King County and we are not tracking locations at this time. There is simply too much of it to require control at this point. However, everyone is encouraged to do their part to stop the spread of this plant into natural areas and to make it a priority in areas where it is just getting going. For information on herb Robert identification and control, follow the links from our herb Robert web page (<http://dnr.metrokc.gov/wlr/lands/weeds/robherb.htm>) or contact our office at [noxious.weeds@kingcounty.gov](mailto:noxious.weeds@kingcounty.gov) or 206-296-0290.

## Weed Tips for December and January

**Plan, plan, plan.** Winter is a great time to reflect on the last weed season and make plans for the next. Where were the weeds last year? When did they show up? What worked and what didn't work? If you found yourself racing to control plants before they went to seed, plan to go to the same places earlier this year to avoid that stress. If you know you need to spray to control any weeds, do the research now to find out what to use, when to use it, and if there are any restrictions or regulations you need to consider. Learn more about the weeds you have by checking out websites on weeds, asking neighbors what they do, or contacting the noxious weed program. Or maybe get a nice hot cup of cocoa and a comfortable chair, and read through all that weed literature you've picked up over the years!

**Meet the neighbors.** If you share weed infestations with neighbors, go meet them now (take them a fruit cake!) and talk about how to tackle the problem together. Can you offer to help them do the work to encourage them to get started? Is there a way to cut down on costs by working together? If the weeds share a river or shoreline, consider holding a meeting with all the neighbors to talk about how to tackle the whole infestation. If you need outside advice or help, consider calling the noxious weed program or other agencies now so there will be enough time to get help in place before the weeds pop up again. Read about a great cooperative neighbor project in the December 20 issue of the Snoqualmie Valley Record (<http://www.zwire.com/site/news.cfm?brd=965>).

**Remove weedy vines from trees.** It's a lot easier to see [English ivy](#) now that deciduous trees have lost their leaves. Trace the vines to the ground and pull up the roots or at least separate the roots from the upper growth. Clear trunks of all strands of ivy up to chest height and then let the upper stems die back. Remove as much of the root as possible, especially near the base of the trees, to stop the vines from growing back up the trunks.

**Plant natives into natural areas.** Competition from well-established plants is a great way to reduce weed problems. Healthy native trees and shrubs can help hold back invasive [blackberries](#), [knotweed](#), [Scotch broom](#) and other aggressive invasive weeds from taking hold. This is a great time to plant shrubs, trees and perennials. Their roots will get lots of rain over the winter and spring, making them stronger and more able to survive the dry summers we usually get. For plant suggestions, planting plans and native plant sources, check out the King County native plant guide at [www.kingcounty.gov/gonative](http://www.kingcounty.gov/gonative).

## Noxious Weed List Update

The Washington State Weed Board made several changes to the WA State Noxious Weed List ([http://www.nwcb.wa.gov/weed\\_list/weed\\_list.htm](http://www.nwcb.wa.gov/weed_list/weed_list.htm)) at their November Hearing. Many of the changes will affect the King County Weed List (<http://dnr.metrokc.gov/wlr/lands/weeds/weedlist.cfm>) and will be reviewed when our Weed Board meets to review the list at the Annual Weed List Hearing being held on **January 16 (4 to 6pm, Mercer Island Library)**. Here is a summary of the State Weed List changes that are likely to affect the King County Weed List.

- Three new Class A noxious weeds: **ricefield bulrush (*Schoenoplectus mucronatus*)**, **European hawkweed (*Hieracium sabaudum*)**, and **variable-leaf milfoil (*Myriophyllum heterophyllum*)**. Of these, only European hawkweed is known to be in this county. Although it is difficult to distinguish from the other yellow-flowered hawkweeds, European hawkweed tends to flower later in the summer and fall and has a distinctive, candelabra-shaped flower cluster instead of the flat-topped clusters of many other hawkweeds. So far, this species seems to be mostly limited to a few state highways in our county, but we will be looking hard for it next year to make sure it hasn't escaped notice in other areas. Although it spreads aggressively by seed, this hawkweed does not spread by creeping roots like several of the others, so it should be relatively easier to eradicate.
- One new Class C noxious weed: **common hawkweed (*Hieracium lachenalii*)**. This hawkweed is similar to the new class A European hawkweed with its toothed leaves, elongated flower cluster and lack of runners. However, it blooms earlier in the season and has fewer flowers. Common hawkweed closely resembles, and is sometimes identified as, smooth hawkweed (*Hieracium laevigatum*), a Class B weed that's county-selected for control in King County. Common hawkweed is not uncommon in King County but there are only a few large sites and most infestations are along state highways and other roads. Common hawkweed is currently county-selected for control under the general category of non-native hawkweeds not listed elsewhere.
- One Class B has been changed to a Class A noxious weed: **common cordgrass (*Spartina anglica*)**. The control of this species of cordgrass represents a nice success story in the region. The reason it is being upgraded to a Class A is that populations have been reduced to the point where eradication is a real possibility. Upgrading it encourages even more aggressive control and monitoring for new populations. In King County, the two small patches of this plant that showed up on Vashon Island seem to be gone now, but are being closely monitored every year to make sure they don't return.
- Three Class C noxious weeds have been changed to Class B's, only one of which is designated for control in King County. **Common reed (*Phragmites australis*, nonnative genotype)**, is designated for control in King County as well as in Asotin, Clallam, Clark, Island, Jefferson, Kitsap, Kittitas, Klickitat, Lewis, Lincoln, Mason, Okanogan, Pend Oreille,

Snohomish, San Juan, Stevens, Thurston, and Yakima counties. The other two are not designated in King County. **Butterfly bush (*Buddleja davidii*)**, is designated in Thurston (on the Nisqually River), Grays Harbor, Kittitas, Lincoln, and Pend Oreille counties. **Poison-hemlock (*Conium maculatum*)** is designated in Clallam, Clark, Jefferson, Kitsap, Kittitas, Lincoln, Pend Oreille, San Juan, Snohomish, and Thurston counties.

- One Class A noxious weed has been changed to a Class B noxious weed: **lawnweed (*Soliva sessilis*)**, for designation everywhere except King, Snohomish, and Thurston counties. This plant, also known as carpet burweed, is a nuisance in turf around swimming and playground areas because of its sharp spiny burs. In some habitats there may be a risk to native grassland species as well. In King County, there are populations of this plant at many parks, sometimes quite dense, but not causing significant issues for users at this point. Populations can generally be managed by good turf practices such as watering, fertilizing and not mowing as short.
- The state noxious weed committee also approved the addition of three new monitor species: **Pampas grass (*Cortaderia* spp.)**, **giant reed (*Arundo donax*)**, and **flowering rush (*Butomus umbellatus*)**. The State Monitor List keeps track of plants that are being watched in Washington to see if there is a need to add them to the state weed list. Monitor species are often invasive in other places with similar climates or neighboring states and provinces. If you know of plant species that should be monitored, you can contact either the King County Weed Board at [noxious.weeds@kingcounty.gov](mailto:noxious.weeds@kingcounty.gov) or the State Weed Board at [noxiousweeds@agr.wa.gov](mailto:noxiousweeds@agr.wa.gov).

In addition to these changes, the King County Weed Board ([http://dnr.metrokc.gov/wlr/lands/weeds/weed\\_control\\_board.htm](http://dnr.metrokc.gov/wlr/lands/weeds/weed_control_board.htm)) can also select additional species for required control from the Class B non-designated list and the Class C list. In the past, the county weed board has selected common reed, non-native hawkweeds, and hairy Willowherb for required control (common reed is now designated for control so it won't need to be county-selected). In addition, the Board selected purple loosestrife and garden loosestrife for required control throughout King County (the state weed list only designates these species for part of the county). Brazilian elodea is also county-selected for required control in most lakes and Scotch broom is required for control along I-90 east of mile marker 34 and on Highway 2 within King County. At the January Weed List Hearing, these county listings and any other proposals received will be considered by the county weed board.

If you have any comments or proposals for the 2008 King County Weed List, you can contact the Weed Board at [noxious.weeds@kingcounty.gov](mailto:noxious.weeds@kingcounty.gov) or by calling Steve Burke at 206-205-6927. You can also attend the Weed List Hearing on January 16, 2007 at 4pm at the Mercer Island Library.

### **Yellow Archangel Control Trial Results**

Roundup doesn't appear to be the most effective treatment for yellow archangel control after all. WSU Extension scientist Tim Miller's control trials on yellow archangel showed a wide range of effectiveness of different products. In terms of amount of re-growth 3.5 months after treatment, the best results (in descending order) were achieved with Gallery, Oust, Garlon 3A, Arsenal, Escort/Ally, Pursuit, and Casoron (Gallery and Oust killed all the plants). Roundup Ultra was next in the list with somewhat more re-growth than Casoron. In terms of percent controlled two months after treatment, the top performers were the same with 78 to 70% control. Roundup Ultra achieved only 53% control. These results suggest that there are some fairly effective herbicide options for yellow archangel, but also that it may not be easy to eradicate a population

without re-treatment or a combination of methods. This study was based on greenhouse trials, so Tim's next step will be to do field trials of the most promising herbicides. He is looking for good test sites, so if you have a nice big population of yellow archangel you would like to get rid of, this might be your chance. If you are in King County, please give me a call at 206-263-6468 or email me at [sasha.shaw@kingcounty.gov](mailto:sasha.shaw@kingcounty.gov) and I can talk to you more about what Tim is looking for.

### **Study Looks at How Horses Move Weeds into Wilderness Areas**

An article in the November 2007 issue of *Rangeland Ecology and Management* (<http://www.srmjournals.org/perlserv/?request=get-abstract&doi=10.2111%2F06-102R1.1>) adds to our common sense understanding that animals can move weeds into new areas. In this study, they look at seeds being carried in the digestive system and deposited along the trailside. From their findings, both native and non-native seeds are spread this way, but the vast majority of the seedlings that were discovered in the deposits belonged to non-native species. This seems to confirm what we already knew intuitively – non-native weeds have a big advantage over natives in their ability to germinate and survive, especially in disturbed areas like trail edges. It is also a good wake up call that preventing this type of movement of invasive species is crucial if we are to stop the encroachment of new invasives into remote wilderness areas. It makes me even more relieved to know that the backcountry horsemen in this area are careful about what they feed their horses when they take them into our wildlands in King County.

### **Research Reveals how *Phragmites* Uses Root-killing Acid to Invade**

New research by University of Delaware scientists shows how the invasive plant *Phragmites australis* (common reed) secretes an acid from its roots below the water line that destroys the roots of neighboring plants by changing their protein structure. The toxin gallic acid targets tubulin, a structural protein in the roots of competing plants. In the study, within 10 minutes of exposure to the toxin in the lab, the tubulin of a marsh plant started to disintegrate. In 20 minutes, the structural material was gone. Once the root breaks down and the plant dies, *Phragmites* can spread without competition. Although all *Phragmites* strains studied had this effect, the non-native strains released higher concentrations of gallic acid than did the native species. This root effect helps explain how *Phragmites* is able to invade and dominate a landscape so completely. We are fortunate in King County to have a limited amount of *Phragmites*, and this study emphasizes the need to work vigilantly to remove the existing populations before they have any further impact. The study is detailed in the October 2007 issue of the *Journal of Chemical Ecology* (<http://www.springerlink.com/content/d541623625v55734/?p=af44774919444287a546eee61c66bc46&pi=3>) and summarized in the October 18, 2007 MSNBC online news journal: <http://www.msnbc.msn.com/id/21365483/from/ET/>.

### **New Invasive Plant Journal being Published**

Manuscripts are currently being accepted for a new peer-reviewed journal on invasive plant science and management, to be published quarterly by Weed Science Society of America (<http://www.wssa.net/>). Topics of interest include fundamental and applied research on invasive plant biology, and ecology, management, restoration, educational, sociopolitical and technological related aspects of invasive plant management. The first issue will be published in 2008, and will include papers on leafy spurge, pepperweed, and cogon grass. For additional information, contact the editor, Dr. Joe DiTomaso, at <[jmditomaso@ucdavis.edu](mailto:jmditomaso@ucdavis.edu)> or check out the publication website <http://www.wssa.net/WSSA/Pubs/IPSM.htm>. (Thanks to Joan Cabreza, EPA Region 10 for this announcement)

## **Small Boater Education Grant Program Welcomes Invasive Species Projects**

Each year, the BoatU.S. Foundation awards local nonprofit volunteer organizations up to \$4,000 for the promotion of clean boating education (<http://www.boatus.com/foundation/cleanwater/grants/>). According to their website, the Foundation has awarded almost \$100,000 to local community organizations, yacht clubs, flotillas and squadrons. They are looking for creative and innovative projects that teach boaters to reduce their impact on the waters they use for boating. Kathy Hamel from Department of Ecology says they are interested in getting in proposals about invasive species this year so it may be a good year to do some boater education on preventing weed invasions.

## **Opening for a Native Plant Stewardship Program Coordinator**

The Washington Native Plant Society (<http://www.wnps.org/>) is requesting qualifications from interested persons to coordinate its Native Plant Stewardship Program in King County. This is a paid contract position and applications will be accepted through January 22, 2008. The Native Plant Stewardship Program educates community volunteers about our region's native plants and plant communities, and teaches how to use this knowledge to protect and restore Washington's natural ecosystems. A wide range of citizens participate in the program each year.

If you enjoy working with people, have good organizational skills and want to be involved in native plant habitat restoration, consider this opportunity to inspire others. For more information on this professional services contract, check out the position description online at [http://www.wnps.org/steward\\_coordinator\\_job.htm](http://www.wnps.org/steward_coordinator_job.htm), or contact: Catherine Hovanic, Executive Director, Washington Native Plant Society, 206-527-3210, [wnps@wnps.org](mailto:wnps@wnps.org).

## **King County Website and Email Addresses are Changing**

The domain name for all of King County's websites and email addresses is changing from **metrokc.gov** to **kingcounty.gov**. This will take place in stages over the next year so the old addresses will still work for awhile. However, you can start using the new emails now and we have a new easy link to our website: [www.kingcounty.gov/weeds](http://www.kingcounty.gov/weeds). As the transfer moves forward, the links in this newsletter and earlier additions may not work, but the quick address above will continue to work and you can always navigate to the individual pages from the index page. Hopefully this will not cause too much of an inconvenience. Please feel free to [contact Sasha Shaw](#) (206-263-6468) if you encounter any problems with accessing our website.