

KC Weed News – June 2008

King County, Washington

<http://www.kingcounty.gov/environment/animalsAndPlants/noxious-weeds/weed-news.aspx>

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Weed of the Month: [Garlic Mustard \(*Alliaria petiolata*\)](http://www.kingcounty.gov/environment/animalsAndPlants/noxious-weeds/weed-identification/garlic-mustard.aspx) Class A Noxious Weed (<http://www.kingcounty.gov/environment/animalsAndPlants/noxious-weeds/weed-identification/garlic-mustard.aspx>)

This month’s featured weed is perhaps the one we fear the most at the King County Noxious Weed Program. Garlic mustard doesn’t look particularly fierce with its small white mustard flowers and bright green leaves. It is even easy to pull most of the time (although it holds on tight when the soil is hard because of its s-shaped root). What is frightening about garlic mustard is its ability to escape notice and spread insidiously throughout a forest, often growing under plants like nettles and hidden by bushes. As it spreads, garlic mustard crowds out native groundcovers and wildflowers and releases toxins into the soil that harm soil fungi needed by tree seedlings. Left alone, garlic mustard can spread into an undisturbed forest an average of 20 feet a year and as much as 120 feet in one year under ideal conditions. Plants can self-pollinate so they don’t need any help to make seeds. Each plant can produce 500 to 1000 seeds and these seeds are long-lived in the soil, producing new plants for 10 years or more. Although garlic mustard is still limited to a few counties in Washington and Oregon, the potential area that could be infested includes most of the northwest including all of the woodlands and shady stream banks of western Washington.

In spite of the potential harm, it is very challenging to contain and achieve complete control of garlic mustard. This is mostly due to the difficulty in finding and identifying plants but also to the prolific seeding and tenacity of garlic mustard once it gets established. Even where dedicated and expert staff have been working hard for several years to eliminate this weed, plants still escape notice each year and seeds in the soil keep on germinating. This is especially true in large, forested areas where it is nearly impossible to cover the whole area thoroughly enough to catch every plant. Persistence will eventually pay off, but only if enough effort is applied each year. This is not a plant that will meekly go away with occasional weed pulls by untrained people.

In 2000, when garlic mustard was added to the Washington State noxious weed list, our program identified 8 populations of garlic mustard in King County, all in North Seattle, including

4 different Seattle parks, the Woodland Park Zoo, and a few private properties and roadsides. By the next year, with increased survey time and better identification skills, our program found twice as many sites, including 4 more Seattle parks and several private properties. Now, eight years later, we've found garlic mustard at 155 sites maintained by 95 different landowners. The total area of known infestations is approximately 350,000 square feet (about eight acres). In addition to many sites in Seattle, we have also found garlic mustard in isolated patches in Bellevue, Lake Forest Park, Kirkland, Renton and recently a few plants were found (and pulled) on the banks of the Cedar River. Although it is possible that we are just getting better at finding garlic mustard, it is clear that it is also spreading to new sites at an alarming rate. Perhaps most disturbing is the fact that garlic mustard keeps popping up in public parks where it is easy for seeds to get picked up on pets and boots and spread to new sites where we will have a tough time finding it before it is too late.

The garlic mustard on the Cedar River was found at a restoration site by a very observant WCC crew member who quickly pulled the plants and reported the site to the noxious weed program. Our staff followed up and found a few additional plants nearby, but fortunately no seed heads and no seedlings. It appears that these plants came in on boots or equipment sometime last year. This really reinforces the importance of weed hygiene – cleaning boots and tools before leaving infested sites is crucial to preventing the spread to new areas of the county and beyond.

In order to avoid the garlic mustard disaster happening in the Midwest and eastern United States, we have attempted each year to reach 100% control of seeding plants, but garlic mustard is a wily weed and manages to avoid detection enough to keep spreading and persisting in spite of our best efforts. This year we have been helped by receiving a grant from the Washington State Department of Agriculture (WSDA), but even with that help, we are hard-pressed to catch all of the plants before they go to seed. The bulk of the Seattle populations are in Seattle Parks properties and their staff has also been working hard to do their part controlling garlic mustard but it is a huge challenge to find, not to mention remove, every garlic mustard plant in some of the large parks.

We often find new garlic mustard sites with the help of others and I can't stress enough how valuable this help is. We can't possibly look everywhere for this plant. Even though it is a challenge to distinguish garlic mustard from similar plants, if you think you see this plant, please [report the site](#) to our program and we will be happy to check it out. We would rather follow up on a bunch of false leads than miss a new outbreak. For help identifying garlic mustard, there are many websites on this plant so a quick www.google.com search for "garlic mustard" or "Alliaria petiolata" will bring up many pictures and descriptions. Our web page on [garlic mustard](#) also has information and photos and you can download the [fact sheet](#) and [Best Management Practices](#) for additional information and pictures. Finally, you can always email us at noxious.weeds@kingcounty.gov with a photo of any suspicious plant and we can tell you what it is. Please feel free to contact us by email or phone at **206-296-0290** with any questions about garlic mustard – we are dedicated to eradicating this noxious weed from King County before it does any more damage.

Weed Tips for June

Spread the word to friends and neighbors about [giant hogweed](#). One group of friends recently threw a party in a backyard surrounded by giant hogweed. Hanging balloons from the large plants seemed like a good idea until several people developed burns and blisters from contact with the plant. A new homeowner discovered that the mysterious plant looming over their deck was giant hogweed but was lucky enough to find out before they got burned. If you

have giant hogweed in your neighborhood, make sure to tell everyone to watch out for this plant and to call the noxious weed program for help if they don't know how to remove it safely. Check the [noxious weed map](http://www.kingcounty.gov/environment/animalsAndPlants/noxious-weeds/maps.aspx) for King County to see if it has been seen in your area (<http://www.kingcounty.gov/environment/animalsAndPlants/noxious-weeds/maps.aspx>). This month, hogweed's large, thick, purple-blotched stalks will be rising above the giant jagged leaves and starting to flower. Digging up hogweed when it is full grown is tricky. Make sure to wear gloves and long sleeves and pants and carefully cut down the flowering stem without getting the juice on you. Then remove the leaves enough to get access to the roots. Dig up as much root as you can, at least 6 inches deep if possible. If there is a risk of anyone coming into contact with the plant or if there are flowers, place the hogweed in a sturdy plastic bag and discard in your garbage. Please [contact our program](#) if you find this plant or need assistance removing it.

Stop garlic mustard before the seeds mature – and watch your weed hygiene! Garlic mustard is on the move in King County. A few plants were recently found on the Cedar River at a restoration site far from any known populations. It would have been easy to overlook these plants but fortunately a very observant WCC crew member recognized it and reported the site to our program. The most likely explanation is that seeds were carried in on boots or tools. There were no seedlings and the plants were pulled before the seeds matured, so we probably caught this outbreak in time. However, it is a bit scary to think that might be happening elsewhere so please brush off your boots and clean your tools before leaving garlic mustard infested sites. If you don't know this plant yet, please check out our website or visit our weed booth at one of our events in June or July (see below for dates and locations). Please email us at noxious.weeds@kingcounty.gov or call us at 206-296-0290 if you do find this plant anywhere in the county so we can move quickly to stop it. Garlic mustard is forming seed pods this month but there is still time to pull plants before the seeds mature.

Pull [tansy ragwort](#) before you see yellow. Bolting tansy ragwort is taking energy from the roots. This means weak roots that are easy to pull out of the ground. Before the yellow flowers open, pulled tansy ragwort can be left to compost without risk of seeds forming. Make sure to keep pulled plants away from livestock – tansy ragwort remains toxic when dry and is more palatable after being pulled. Look for tansy ragwort anywhere it was growing last year – seeds last up to 16 years in the soil, so you are sure to get new plants where it was last year. Remember to look for low-growing rosettes as well as tall, bolting plants.

Act quickly to stop flowering weeds from going to seed. In spite of the cold spring, we've had plenty of sunshine and rain for noxious weeds to prosper and multiply. When weeds are flowering, it means there's no time to lose. Preventing seeding means saving time and money and it's also the easiest time to spot hard-to-find weeds. Noxious weeds that are flowering now include: [garlic mustard](#), [Dalmatian toadflax](#), [spotted knapweed](#), [meadow knapweed](#), [orange hawkweed](#), [yellow hawkweeds](#) (just starting in most places), [poison-hemlock](#), [Scotch broom](#), and [herb Robert](#). Many more noxious weeds will start flowering in June including: [diffuse knapweed](#), [milk thistle](#), [sulfur cinquefoil](#), [giant hogweed](#), [tansy ragwort](#) and [goatsrue](#).

Report [designated Class A and B noxious weeds](#) on roads and trails. County, city and state crews are all busy working on noxious weeds along roadsides, trails and parks. However, even with their hard work and our own efforts to send them locations of regulated noxious weeds, we can't be everywhere and some sites get missed. If you see a patch of tansy ragwort or any other regulated noxious weed growing on public land or a roadside, please contact our office and we will make sure the right agency or property owner gets notified quickly. We can be reached at 206-296-0290 or you can use our online infestation report form,

<http://www.kingcounty.gov/environment/animalsAndPlants/noxious-weeds/infestations-form.aspx>.

New Look and Address for King County Noxious Weeds Website

Check it out at www.kingcounty.gov/weeds. Our website has a new look and new features as well as all the existing information and resources on noxious weeds in King County. The address is new also so your old links may not work, especially at the end of this year. The quick link address above will always get you to the home page and you can follow the links from there to other pages like [Weed Lists](#), [Brochures](#), [Weed Photo Index](#), [Maps](#) and so forth. If you have pages on our website bookmarked or linked from your website, you might want to update them since the re-directs won't work after the end of the year. Please [contact me](#) if you have any questions or suggestions for the website – it's always a work in progress!

Middle Fork Snoqualmie Valley Needs Weed Watchers – June 29 and Beyond

Like to hike? Hate weeds? The [Middle Fork Invasive Weed Project](#) is looking for volunteers to become weed watchers along the beautiful trails of the Middle Fork Snoqualmie Valley. Help survey the valley's spectacular trail system for invasive weeds so we can stop them before they get entrenched. We're surveying trails from Mt. Si near North Bend to Dutch Miller Gap in the heart of the Alpine Lakes Wilderness. On **June 29 at 9am** we will hold a short training and project update at the [North Bend Ranger Station](#) meeting room and then we will head out to survey a trail or two in the Middle Fork Valley. We will provide instructions, maps and survey forms as well as weed ID sheets for the species we are most interested in finding. Afterwards, you can sign up for more trails and come back to survey them at your convenience during the summer. We should be back at the Ranger Station by 5pm. For more information see To sign up, contact Mark Boyar at mboyar@practicepartner.com or 206-760-9041.

Knotweed Control Workshops – Cedar River, North Bend, and Covington

Invasive knotweeds are perhaps the toughest plants for homeowners to control – both because the plants are so tough to get rid of and because they so often grow near water or other challenging areas. Our grant programs have helped us get started on controlling knotweed along some of the county's large rivers, but there is much more knotweed out there than we can control with our program's resources. This year, we are holding three workshops for homeowners on how to control knotweed successfully. The dates and locations are:

- **June 24**, 7:00-8:30 pm, Hosted by the [Cedar River Council](#) at the Maplewood Golf Course, 4050 Maple Valley Hwy, Renton
- **July 9**, 7:00-8:30 pm, [Meadowbrook Farm Interpretive Center](#), 1711 Boalch Ave, North Bend (we will also cover other invasive weeds at this session)
- **July 15**, 7:00-8:30 pm, [Covington Library](#), 27100 164th Ave. S.E., Covington

We especially encourage people to attend from the Cedar, Snoqualmie, Issaquah, Soos Creek/Green River and South Fork Skykomish watersheds where we have knotweed control projects underway or planned, but anyone interested in tackling knotweed is encouraged to come. We will teach how to recognize knotweed year round, how knotweed grows and spreads, how to use different methods and where to use them (including how to use the amazing stem injector!), and how to plan your knotweed control to improve your chances for success. It isn't easy, but with planning, knowledge and persistence, it is possible to control knotweed. Please contact Sasha Shaw for more information at 206-296-0290 or email sasha.shaw@kingcounty.gov.

Where to Visit the County Weed Booth in June and July

The Noxious Weed Program will be giving out information and advice at several locations and events in June and July. In addition to useful handouts and weed control advice, we will have live weed specimens on hand because seeing the real thing is the best way to identify these pesky weeds. Come visit us at these locations in June and July:

- **June 4**, 4-8 pm, [Sammamish Farmer's Market](#), Sammamish Commons, 801 228th Ave, Sammamish
- **June 7**, 11-4, [Vashon Low Tide Festival](#), Pt. Robinson, Maury Island
- **June 8**, 12-4, [Celebrating Wildflowers Festival](#), Olympic Sculpture Park, Seattle
- **June 14**, 9-2, [Issaquah Farmers Market](#), Pickering Barn, Issaquah
- **June 25**, 2-7 pm, [Kirkland Wednesday Market](#), Park Lane East, between Main Street and 3rd, Kirkland
- **July 2**, 4-8 pm, [Sammamish Farmer's Market](#), Sammamish Commons, 801 228th Ave
- **July 10**, 3-7 pm, [Bellevue Farmers Market](#), 1717 Bellevue Way NE, Bellevue
- **July 12-13**, [Vashon Strawberry Festival](#), Vashon
- **July 18-20**, [King County Fair](#), Enumclaw Fairgrounds, Enumclaw

Getting the Bugs Out – Biocontrol in King County

The King County Noxious Weed Board is proud to be supporting biological control for noxious weeds in the county and recently approved spending \$8,500 on the biocontrol program for 2008. We partner with Jennifer Andreas from the WSU Extension Biocontrol Program to find ways to use natural controls to help us in our fight against noxious weeds in the county. With a few weeds and in certain situations (for instance, very large sites, hard to access populations, herbicide restricted areas), we can introduce federally approved insects and other organisms to help reduce the spread and impacts of noxious weeds. These organisms are natural enemies of the weeds and are highly specialized to damage only the intended target. If it is discovered that insects are damaging other plants, we won't release it even if it does do a good job controlling the weed. It is important not to do more harm than good when trying to control weeds! When the insect is a good biocontrol agent (just damages the target weed, can survive and reproduce here, and can be collected and distributed), then it can still take many years for populations to build up enough to start reducing the weed population. But, when it works, it really helps, and can significantly reduce the damage done by the weed and reduce the cost of controlling it by other methods. It's hard to beat biocontrol for low impact weed control, and it's really fun to see the bugs go to town on the weeds we spend so much time and effort to control.

One success story for biocontrol in King County is the excellent control achieved for purple loosestrife with the *Galerucella* foliage-feeding beetles. In Marymoor Park, for example, the purple loosestrife population has been reduced so much that it may not even flower this year (sadly, this is the same wetland inundated with garden loosestrife, but at least we have one less loosestrife to battle there!). Similar results can be seen in other wetlands in the county.

The planned biocontrol program for 2008 includes the following weeds and biocontrol agents:

1. Purple Loosestrife: Foliage beetles and flower bud weevil
2. Canada Thistle: gall fly and stem weevil
3. St. Johnswort: possible root beetle and foliage moth
4. Scotch Broom: seed bruchid
5. Spotted Knapweed: seed weevil and root weevil
6. Tansy Ragwort: possible root flea beetle
7. Dalmatian Toadflax: stem-mining beetle and possible flower beetle and flower weevil

In addition to releasing existing biocontrol agents, Jennifer is also researching potential agents. For instance, there is a gall found on Scotch broom that may be a good agent but first Jennifer and others will study whether it attacks beneficial species as well. This gall is often found on Scotch broom in our county so we may start seeing good results without doing anything to help it!

Sites for bug releases are chosen based on their size, other weed control being done, disturbance on the site, and other factors. For more information, please contact [Jessica McKenney](#) with the King County Noxious Weed Program at 206-296-0290 or [Jennifer Andreas](#) with WSU Extension at 206-205-3135.

Scotch Broom Allergies – What’s Going On?

I have heard from many folks about Scotch broom and allergies – both from those suffering and those who don’t think it makes sense based on the nature of the pollen. So I found it very useful to read a recent email sent by Nancy Ness, coordinator of the Grays Harbor County Weed Board. She contacted the Northwest Asthma and Allergy Center to find out what was going on with this plant. Their answer was that it is true the pollen is heavy so not likely to be directly causing the problem. What happens is that people with allergies to plants that are producing pollen at the same time as Scotch broom (grass, plantain, lambs quarters. etc.), develop a “hyperresponsive airway” that is irritated by the chemical that is responsible for Scotch broom’s odor. In other words, it’s the smell that causes the misery. When Scotch broom is growing in dense patches, its odor is very strong and distinctive, so this makes sense.

Fortunately, the Allergy Center also explained that they can test for a Scotch broom allergy and treat for it. They basically help the body “learn” not to over-respond and to reduce the pain and suffering that the reaction can cause. Given how much Scotch broom is out there, this treatment is probably a safer bet than waiting for it all to get controlled! For more information, contact the Northwest Asthma and Allergy Center or check out their website at <http://www.nwasthma.com/index.asp>. Thanks to Nancy Ness for sending out this information!