

KC Weed News – December 2011

King County, Washington

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

TOPICS BELOW

- Weed of the Month: Common Hawthorn (*Crataegus monogyna*)
- Weed Tips for December
- County Weed Board to Hold Public Hearing for 2012 Weed List
- Long-Time Board Member is Stepping Down
- Shop Online for Local Native Bareroot Trees and Shrubs
- King County Parks Excels at Weed Control in 2011
- Puget Sound Partnership Seeking Comments on its Action Plan
- Giant Hogweed in King County – How Are We Doing?
- What's Up with the Class A Noxious Weed European Hawkweed?
- Changes Planned for NPDES Permit for Aquatic Herbicide Applications in Washington
- "Bathtub" Knotweed Studies Show Interesting Early Results
- US Forest Service Takes Action to Confront the Threat of Invasive Species
- New Website Provides a "Gateway to Pest Identification"
- Forest Invasive Species Field Guide Released



Weed of the Month: [Common hawthorn](#) (*Crataegus monogyna*), a [Weed of Concern](#) in King County, Washington

This time of year, I enjoy relaxing on a cold, dreary day by sitting inside and gazing out at the birds and squirrels foraging for food in the woods behind our house. One of the most common sights is the introduced Eastern gray squirrels munching on the red berries of the non-native common hawthorn trees growing wild behind our house. The red hawthorn berries make me think of Christmas, so I thought it was fitting to write about this plant in December. Unfortunately, these same berries also remind me of the endless weeding of small, thorny seedlings I do the rest of year, right under where all those squirrels are feasting.

If I just looked out my window and enjoyed watching the squirrels or admired the pretty red berries of these trees, I might miss what is happening beyond my window. Just like in my own yard, squirrels, birds and other animals are carrying common hawthorn seeds far and wide and depositing them with a little natural fertilizer, all set to grow into new trees. If this happens in vacant lots or even backyards like mine, it might seem like a benefit. But if this happens in woodlands with native trees and wildlife or in fields grazed by livestock or wildlife, common hawthorn can become more harmful than beneficial.

The impacts are subtle, since this European tree mimics some of the habitat benefits of our local berry-producing trees and shrubs, such as our native [black hawthorn](#) (*C. douglasii*) or [red elderberry](#). However, because our local wildlife and birds have a long history with our native trees and shrubs, they are generally not as good at using non-native species such as common hawthorn. In contrast, the birds that were also imported from Europe or the more aggressive wildlife like the Eastern gray squirrel are perfectly able to make use of the hawthorn trees, giving them an advantage over the native species. For our native plants and trees the impact is very direct – common hawthorn spreads quickly and can out-compete and replace native trees and shrubs. Similarly, in pastures and open fields, the sharp thorn and dense growth of hawthorn trees can seriously interfere with grazing and access by wildlife and livestock. Since common hawthorn is spread by birds, it has the potential to spread well beyond the urban areas and into remote natural areas where it can spread unchecked.

I find [common hawthorn](#) easy to recognize, even as a small seedling. The leaves resemble miniature animal paws or hands and there are sharp thorns even on the very young plants to remind you if you forget what the leaves look like. Common hawthorn is closely related to and easily hybridizes with other introduced hawthorn species such as English or midland hawthorn (*C. laevigata*) so trees have somewhat variable leaf shape and other characters. Common hawthorn flowers are white but on the trees in our area, the flower color ranges from pink to white, probably because we have both species as well as hybrids. Common hawthorn is in the Rose Family and the blooms do indeed look like clusters of little wild rose or apple flowers. The Latin name, *C. monogyna*, corresponds to another common name for this species, one-seed hawthorn, and tells us what to expect if we break open the berries. The bark is gray-brown and distinctively rough and cracked. The sharp spines are easy to find on younger stems.

Left to grow naturally without pruning, hawthorn trees form a tangled, dense mass of branches and many trees can grow close together, forming impressive thickets. When used as a fence row, hawthorn creates an impenetrable barrier to both animals and people. Unfortunately this same trait becomes a problem when hawthorn grows where it isn't wanted. Hawthorns spread entirely by producing an alarming abundance of berries that all seem to germinate. It is an awe-inspiring sight to see the density of seedlings under our hawthorn trees, and they seem perfectly able to grow under the canopy of the shrubs and other trees growing in our yard.

Common hawthorn is one of a group of introduced trees in our region that have become naturalized to the point where they are impacting native plant communities and often causing other nuisances like common hawthorn does in pastures. Although we usually think of weeds as smaller plants like dandelions and thistles, invasive trees create their own suite of problems, and can be very difficult to control once established. Many of these tree species are so widespread already in our region that eradicating them is not realistic, and certainly for common hawthorn standing trees do provide some benefits as well as problems so complete removal might not be the best approach. However, it does make sense to avoid planting more of this tree and others that are known to be invasive, and to remove them from natural areas and pastures before they become entrenched. In King County, we consider common hawthorn to be a [Weed of Concern](#) and we encourage removal from areas being restored to native plants or pasture areas. We also encourage planting of native or non-native alternatives that will provide more benefits than problems. For more information, see our [website](#).

Weed Tips for December

'Tis the season to reflect. Winter is a great time to think about the past 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.

Remove weedy vines from trees. It's a lot easier to see [English ivy](#) now that deciduous trees have lost their leaves. Clear tree trunks of all strands of ivy up to chest height and the upper stems will die back (ivy needs to be rooted in the ground to grow). It can be hard to remove large woody vines, so it helps to have a stout screw driver or pry bar. Just make sure not to cut into the tree bark. Around the base of the tree, remove as much of the vines and roots as possible to keep the vines from growing right back up the tree. It's good to clear at least three to six feet around the tree base and mulch with wood chips or a similar material.

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.

Look for excuses to get outside. If you are getting cabin fever, there are still many things you can do about weeds in the winter time. Evergreen invaders are easy to spot this time of year. Even if it's too cold to do much weed pulling, you can at least make a map of where things are growing in order to plan for next year. Invasive trees and shrubs like [holly](#), [laurel](#), [Scotch broom](#), [gorse](#), and [spurge laurel](#) all stand out this time of year. Even [invasive knotweed](#) is easy to find – just look for the tall, reddish brown canes growing in patches along rivers and roadsides. [Yellow archangel](#) is still growing but much more slowly so this is a good time to pull existing plants and install sheet mulch or weed blocking fabric (in areas where there isn't anything else growing). Make sure you carefully collect all stems and roots and dispose of them in a yard waste container or the

garbage. Yellow archangel spreads easily from fragments and should never be disposed of in the woods. And if [creeping buttercup](#) is your nemesis, remember that winter is the best time to dig up plants because the roots die back somewhat, making it much easier to remove entire plants (of course, easier is relative – you will still need a stout digging tool and warm, waterproof gloves).

County Weed Board to Hold Public Hearing for 2012 Weed List

The annual King County Noxious Weed List Public Hearing will be held on **January 11**, 4 pm at the [Mercer Island Library](#) in the large meeting room. The purpose of this hearing is to review the 2012 Washington State Noxious Weed List and consider whether to require control of any listed noxious weeds in addition to those designated by the State Weed Board. The [King County Weed Board](#) will also decide which noxious weeds to encourage county residents to control by including species on the Non-Regulated Noxious Weeds and Weeds of Concern lists. The public is invited to submit comments about the county noxious weed priorities and weed list, either at the meeting or ahead of time by email to noxious.weeds@kingcounty.gov or mail to Steven Burke, King County Noxious Weed Control Program, 201 S. Jackson St., Suite 600, Seattle, WA 98104.

In Washington State, county weed boards are required to include all state Class A and state-designated Class B weeds on the county weed list (see the [State Weed Board website](#) for the current state weed list). In addition, county boards can select additional Class B and Class C weeds from the state list for the county list and may require property owners to control these species in part or all of the county (see the [King County Weed List](#) for information on the current county list and selected control areas).

This year the State Weed Board added three new species to the state noxious weed list, effective January 1, 2012 (see the [State Weed Board website](#)). [Oriental Clematis \(*Clematis orientalis*\)](#) was added to the Class A list, [Tree-of-heaven \(*Ailanthus altissima*\)](#) is a new Class C weed, and [Japanese eelgrass \(*Zostera japonica*\)](#), has been declared a Class C noxious weed but only on commercially managed shellfish beds. All counties are required to add Oriental Clematis to their Class A lists and can decide whether to include the two new Class C weeds or not.

In addition to the new weeds, the County Weed Board will review the existing list and decide whether to continue the previous year's county selections. These include:

- A. Continue to require control county-wide of the following Class B weeds: [tansy ragwort \(*Senecio jacobaea*\)](#), [purple loosestrife \(*Lythrum salicaria*\)](#), and [garden loosestrife \(*Lysimachia vulgaris*\)](#). Tansy ragwort is not designated by the State Weed Board for required control in King County. Purple loosestrife and garden loosestrife are state-designated only outside of the most densely infested areas. The County Weed Board has chosen to require control of all three species county-wide in previous years.
- B. Continue to require control county-wide of the following Class C weeds: [common hawkweed \(*Hieracium lachenalii*\)](#), and unspecified non-native invasive hawkweeds (*Hieracium* sp.)
- C. Continue to require control of [Scotch broom \(*Cytisus scoparius*\)](#) along I-90 from mile marker 34 east to the King/Kittitas County line and along the King County section of Highway 2, in order to provide a buffer for neighboring counties, but keep it on the list of non-regulated noxious weeds for recommended control elsewhere in the county.

- D. Continue to require control of [invasive knotweeds](#) (*Polygonum* spp.) on the sections of the Green River and tributaries where we have achieved good control through our externally funded projects in order to sustain that level of control for that system. The language on this would remain the same as last year (see the [Non-Regulated Noxious Weed List](#))

The King County Weed Board welcomes public input and comments are encouraged. If you have any proposals or comments, contact Steve Burke by [email](#) or phone at 206-205-6927 or attend the public meeting on January 11 at the Mercer Island Library.

Long-Time Board Member is Stepping Down

Long-serving King County Noxious Weed Board Member Duane Johnson has decided to hand over the reins for his weed board position. Duane has represented citizens of King County Weed Board District 2 since 1998. This position covers the Snoqualmie Valley and the cities of North Bend, Snoqualmie, Sammamish, east Redmond, Carnation and Duvall. Duane has been a tireless advocate for farmers' interests on the Weed Board, always seeking to minimize the impacts of noxious weeds on agriculture. He has also been a consistent voice for cost-effective use of public funds as well as for using education and technical assistance first whenever possible to help landowners control their noxious weeds. Duane often reminds us that the Weed Board's primary role is to help landowners fight against noxious weeds, not to be a regulatory agency. He is a cattle breeder and beef producer near Snoqualmie and is also a citizen representative on the City of Snoqualmie Planning Commission. King County and the Weed Board have been fortunate to have had the benefit of 12 years of Duane's volunteer service. We will really miss his knowledge about farming and weeds in the county and his long-term perspective, but most of all we will miss Duane's kindness and his sincere desire to help others and make a positive difference in the world.

Shop Online for Local Native Bareroot Trees and Shrubs

Pre-orders are being accepted now for the King Conservation District's (KCD) annual native tree and shrub sale. KCD offers a variety of locally grown native trees and shrubs that are well-suited for wildlife habitat, windbreaks, hedgerows, reforestation, stream enhancement or native plant landscaping. The plants are bareroot stock, which means they do not come in pots or burlap bags, but are harvested from the field in winter when the plants are dormant and ready to be replanted. Because they are bareroot, the plants are less expensive, easy to transport and simple to plant (although it's important to follow directions about protecting the roots since they don't have any soil on them). The plant sale is March 2 and 3, 2012, but pre-ordering is strongly encouraged to ensure availability. This year for the first time [online ordering](#) is available but you can also print out the paper order form from the website and mail it in with a check. They don't ship so plants have to be picked up on March 2 or 3 from the KCD office in Renton. Walk up sales are also possibly on March 2 & 3. For more information and to place a pre-order please visit the KCD website at www.kingcd.org or contact Jacobus by email at jacobus@kingcd.org or by phone at 425-282-1912.

King County Parks Excels at Weed Control in 2011

After evaluating their weed control results for 2010, King County Parks made the commitment to improve their noxious and invasive weed control performance. We are very pleased to report that their commitment is paying off in greatly improved detection and control of noxious weeds in the county. To meet their objectives, Parks dedicated a

full time position to achieve control of noxious weeds as their primary responsibility. In addition, they dedicated a seasonal employee to assist with the effort. As a result, the improvements in Parks noxious weed control efforts during 2011 were very noticeable. Control of noxious weeds was often accomplished without any notification from our program staff. If we did notify Parks of a noxious weed infestation, it was controlled within a week of notification, sometimes within a day. Additionally, as a result of regular training and encouragement from supervisors, other Parks staff are also becoming very knowledgeable in weed identification. They have found and notified us of new infestations of noxious weeds on county property, and then followed up by controlling them. In particular, Parks staff were instrumental in identifying new infestations of the highly invasive Class A noxious weed [garlic mustard](#) along the Cedar River. Parks is looking into the possibility of further weed control enhancements in 2012 through additional staff and equipment. This kind of commitment and follow-through in a county department makes a huge difference in reducing the impacts of noxious weeds in King County.

Puget Sound Partnership Seeking Comments on its Action Plan

Restoring and protecting Puget Sound is a huge task and the Puget Sound Partnership is seeking comments on the next two years of work towards this goal. The draft update to the Puget Sound Action Agenda and Biennial Science Workplan is posted at http://www.psp.wa.gov/action_agenda_2011_draft-content.php. It is presented in two sections: Section 1 is an executive summary of priority work for the next two years and Section 2 contains the strategy and action details, the 11 local profiles, and the funding strategy. The Biennial Science Workplan contains strategies and actions to support the Action Agenda. The Partnership will be accepting comments through **January 20, 2012**. Comments may be submitted to actionagenda@psp.wa.gov or by mail at Puget Sound Partnership, 326 E D Street, Tacoma, WA 98421.

According to the Partnership, the draft represents an almost year-long effort on the part of hundreds of experts from Tribal governments, state and federal agencies, local jurisdictions and governments, academia, business interests, environmental interests and non-governmental organizations, and concerned residents of the Puget Sound region. They report that there are new recovery targets, revised strategies and more measurable actions as well as a better link between the Action Agenda and the scientific work plan. However, they realize there are still issues to work on. They are particularly seeking feedback to better identify and prioritize local strategies and actions. The long list of proposed activities is going to be winnowed down, so this is an opportunity to voice your opinion on what's most important to accomplish in the near future and what can be left to a later date. Here are a few of the key questions the Partnership asks reviewers to give them feedback on:

1. Do the strategies reflect all the work that will be needed to protect and recover Puget Sound in the long run?
2. Do the near-term actions truly represent what most needs to be done in the near future to protect and recover Puget Sound?
3. Is the proposed approach going to result in priorities that will truly serve the ecosystem, and that the region can rally around as the critical places to invest increasingly scarce resources? How do local and regional priorities correspond to each other?

For more information, contact Kristen Cooley, Education & Outreach Manager, Puget Sound Partnership, phone 360-701-4604 or email kristen.cooley@psp.wa.gov.

Giant Hogweed in King County – How Are We Doing?

This is the time of year we reflect on how things went this year and where we are headed, so I thought it would be interesting to look more closely at perhaps our most famous noxious weed, [giant hogweed](#). This is the 10 foot tall escaped ornamental that causes such nasty burns and blisters and is becoming well known all across the United States and throughout Europe. Not only is it famous for its nasty effects on our skin, but it is also extremely successful at spreading and dominating the landscape, especially on ravines and streamsides, but also in backyards, alleys, and pretty much anywhere the seeds end up. When our program started operations in 1996, giant hogweed was already pretty abundant in our county and we quickly found a large number of sites. By 1999, we had records of over 750 properties with hogweed and found 198 new sites in that year alone.

Now in 2011, our database has records of 1,788 hogweed infestations discovered since we started keeping track in 1996. That's a lot of properties and a lot of property owners to work with. But fortunately, because most of these sites are in city lots, the total area covered is actually relatively small. At the peak in 1999, hogweed covered only 2.3 acres spread over 480 sites, and currently adds up to only 1.5 acres over 227 sites. We are also seeing some decline in the number of new sites found each year, down from around 100 annually in the first few years to about 50 new sites every year for the past few years. One of the most satisfying things is how many of the sites are no longer infested. Because of the seed bank, we keep checking sites annually for three or four years after we last see hogweed, then we call that site "dormant" and start checking it less often. We only "close" a site if it's been dormant for so long we are pretty sure the hogweed is well and truly gone. Since we began, 75% of the sites are now "dormant". It's not eradication yet, but we feel good about the progress we are making toward that lofty goal.

What's Up with the Class A Noxious Weed European Hawkweed?

When [European hawkweed](#) (*Hieracium sabaudum*) was added to the state noxious weed list in 2008, only a few locations of this plant were known in the state, so the state weed board added it to the [Class A noxious weed list](#), the highest priority for control statewide, and asked all county weed boards to find and destroy all populations of this species. In 2008 we located more populations in the county and since then we have found a few more sites, but still far fewer than other invasive hawkweeds, and all so far on public lands or rights-of-way. All known sites are being actively controlled either by our program staff or the lead agency for the property. It might be too early to say this, but we believe we have made some progress toward the goal of eradicating it from the county. It helps considerably that WSDOT crews are now well-trained in identifying this species and work hard to control it on the State Highways. However, we have also found that this is one of the more difficult hawkweeds to completely get rid of, especially due to its prolific seed production, and it isn't that easy to find in the first place, so we likely have many more years of work ahead of us.

Like other hawkweeds, European hawkweed is mostly limited to poor soils and disturbed areas like roadsides. Unfortunately it is also well-adapted to higher elevations and has the potential to invade wilderness and mountain recreation areas. The European hawkweed populations in King County are all in the eastern or northern part of the county and mostly on state highways – I-90 and Highways 2, 522, 202, and 18.

Because of where it occurs and how well adapted it is to high elevations, we are concerned about the possibility that European hawkweed will spread up into the mountains as orange and yellow hawkweed have done.

Currently the largest infested area covers 4 miles on I-90 from exit 38 to 42. The other highway populations are smaller and more scattered. Off the highways, there are a few sites. The largest is at the State Fire Training Academy, on State DNR owned land, covering close to an acre, and there are a few smaller patches including one on the John Wayne Trail near the Twin Falls power plant, some on the road near Olallie State Park, and a few others. In addition, the Cedar River Watershed has also found small amounts of this hawkweed as well as others along their roadsides. Given how dispersed these sites are in the county, it is likely there are a few more than we have found. However, European hawkweed blooms late enough in the season to stand out from most other yellow-flowered weeds on the roadside, so we believe we have found most of the significant populations in the county. Also, most of the infestations are now much reduced from their original size or at least much less densely infested. The large, well-established I-90 infestation still covers about the same area but it is much more scattered. Other less-established infestations have been reduced much more in size and some have even disappeared.

Changes Planned for NPDES Permit for Aquatic Herbicide Applications in Washington

The Washington Department of Ecology is reissuing their Aquatic Noxious Weed Management General Permit, first issued in 2008. The revised permit will replace the current permit in 2012 and will continue to be issued to Washington Department of Agriculture (WSDA) as a blanket permit, who will in turn extend coverage to other agencies and organizations seeking to use herbicides to control noxious weeds in Washington. The permit regulates the use of pesticides and other products applied to manage State-listed noxious weeds and quarantine-listed weeds, where pesticides or other products may indirectly enter the state's surface waters via inadvertent and incidental overspray or dripping of chemicals from the treated plants. The permit covers all marine and freshwater activities that result in a discharge of herbicides, adjuvants, and marker dyes indirectly into streams, rivers, estuaries, marine areas, wetlands, along lake shorelines, and other wet areas. The permit also covers the treatment of noxious- and quarantine-listed vegetation for roadside/ditch bank management activities, where chemicals may indirectly enter the water. WSDA will continue to cover the costs of the permit through this blanket permit from Ecology.

However, one of the major changes from the previous permit is that it does not apply to the in-water application of chemicals directly into lakes, ponds, streams, or rivers to manage freshwater noxious- and quarantine-listed weeds. Any application that intentionally applies herbicide to a waterbody or river (even to control a regulated noxious weed), will need to go through the separate permitting process for algae/nuisance vegetation control. There will also be a much higher cost for the permit through this process as well as a longer turn around time to receive the permit.

The permit covers control of state-listed noxious weeds and quarantine species as any non-native, invasive plants as approved by Ecology (for example, bittersweet nightshade is not a listed noxious weed but could be covered upon request if Ecology approved it). The permit will continue to cover all lands except federal and tribally owned ones, which

are now required to get a federal NPDES permit from EPA in a separate process that is likely to be more complex and time-consuming than the state permit.

Wording on the new posting signs associated with Ecology's permit is designed to be clearer for area users. Posting is still only required in sites with public access and must be put up on the day of treatment and left in place for 24 hours. Day-of notice is required either verbally or in writing for any residence or business within 200 feet of the treatment area (the goal is to make sure landowners are aware that you've recently treated so they do not enter the area while wet). New signs do not have warnings about swimming or fishing restrictions as there are none.

For more information, go to

http://www.ecy.wa.gov/programs/wq/pesticides/final_pesticide_permits/noxious/noxious_index.html to see the permit. For questions, contact Kathy Hamel, (360) 407-6562, or kathy.hamel@ecy.wa.gov. [Thanks to Joan Cabreza, [Aquatic Invasive Species News in a Nutshell](#), September-December 2011 and Frances Lucero for their contribution to this article.]

“Bathtub” Knotweed Studies Show Interesting Early Results

Tim Miller presenting at the OKWG fall meeting, Port Hadlock, Nov. 15, 2011

Those attending the recent Olympic Knotweed Working Group meeting in Port Hadlock heard about an interesting new study that aims to learn more about how exactly knotweed grows and moves herbicide through itself. Tim Miller, with WSU Extension Mount Vernon, hopes to isolate knotweed rhizomes to better determine how they act both in supporting the plants' growth and in absorbing herbicide (as in how far and how effectively it is translocated and how quickly this process happens). The study name comes from the handy plastic wading pools being used to isolate the knotweed.

Knotweed rhizomes were transplanted into one gallon pots. Rhizomes included three inches of root crown and one inch of cane. All transplanted pieces rooted in the first growing season, and were transplanted into plastic wading pools half buried in the ground outside. The new plants went into potting soil so that it would be easy to remove them later without damaging the roots. Plants grew out for a season, and Tim treated the test plants in two timing groups (late summer and late fall) with two types of herbicide each (imazapyr and glyphosate, both foliar and injected). Technicians removed the knotweed stems and rhizomes from each pool either one day after treatment or three days after and measured the season's growth. They then planted the rhizomes in flats and let them grow to see how many had any bud activity. Less bud activity showed better herbicide translocation and efficacy (since both herbicides should inhibit growth).

Tim will be replicating the study with another season and may adjust rates slightly, but had some interesting preliminary results. On the morphology side, plants grew between five and eleven individual rhizomes in one year with a total length between 6.5 and 15.5 feet. One day was enough to show significant inhibition of budding on imazapyr treated plants, while glyphosate did better with three days. Injected plants showed poorer results, but Tim also pointed out that he may have skewed these results slightly by selecting out larger plants to treat by injecting, since they needed to have large enough canes. Both herbicides worked better in the fall treatment (middle of October in this case) when plants are scavenging nitrogen from their leaves, which may lend support to

the idea of waiting until later in the season to treat. [Thanks to Frances Lucero for this report.]

US Forest Service Takes Action to Confront the Threat of Invasive Species

On December 5, the U.S. Forest Service announced that the publication of its first ever national-level direction on the management of invasive species across aquatic and terrestrial areas of the National Forest System. "Invasive species cost the American public an estimated \$138 billion each year. They deplete water supplies, destroy recreation opportunities and damage landscapes across the country," said U.S. Forest Service Chief Tom Tidwell. "We are taking this bold approach to better protect our nation's forest and water resources from the threat of invasive species." While the Forest Service has long had a Forest Service Invasive Species Program, this policy adds new requirements for agency-wide integration of invasive species prevention, early detection and rapid response, control, restoration, and collaborative activities across all National Forest System lands. "The integrated nature of this new approach will make the Forest Service able to more effectively manage invasive species in the context of environmental issues such as adaptation to climate change, increasing wildfire risk, watershed restoration, fragmentation of habitats, loss of biodiversity, and human health concerns," said USDA Undersecretary Harris Sherman. "At the same time, we will be engaging the public, including participation by Tribes, in these programs and benefits."

The proposed policy was published on June 3 in the Federal Register for a 60-day public comment period. The final policy published in the Federal Register reflects the consideration of comments received from a wide variety of stakeholders in the public and private sectors, including non-government organizations, state and local government agencies, private individuals, and other Federal government agencies. To see the final policy go to <http://www.gpo.gov/fdsys/pkg/FR-2011-12-05/pdf/2011-31090.pdf>. [Excerpted from Joan Cabreza, [Aquatic Invasive Species News in a Nutshell](#), September-December 2011]

New Website Provides a "Gateway to Pest Identification"

A collaborative effort between USDA's Center for Plant Health Science and Technology, and staff at Colorado State University, has recently produced *idsource*, a specialized search tool for identifying the global maze of over 1,400 vetted websites that focus on identification of plant pest insects, diseases, and weeds. The objective is to help users rapidly find trustworthy websites for screening, detecting, and identifying species among the multitude of existing sources. Users can access the massive database by alphabetical order, by specific class of pest, or by key words. For ease of use, an interactive link is listed for each included item, along with the name of the originating organization, the site's contents, the nature of the material included (e.g., fact sheets, screening aids, images), and individualized notes about the site. The original concept for *idsource* arose in 2006, and work was first launched at the Centre for Biological Information Technology at Australia's University of Queensland. To access the database, go to

<http://idsource.colostate.edu/cwis438/websites/IDSource/Home.php?WebSiteID=11>.

[Excerpted from Joan Cabreza, [Aquatic Invasive Species News in a Nutshell](#), September-December 2011]

Forest Invasive Species Field Guide Released

The recent Forest Service's Pacific Northwest Research Station release, *Nonnative Invasive Plants of Pacific Coast Forests: A Field Guide for Identification*, is a concise and well-illustrated field guide for both novice botanists and managers. The final species list focused on species believed to be most prevalent or problematic for use in strategic forest inventories, said Andrew Gray, principal author. The 91-page color guide provides detail on each plant in nontechnical language, and photos of different stages of plant development are included to allow reliable identification in the field at different times of the year. To download the guide, visit http://www.fs.fed.us/pnw/pubs/pnw_gtr817.pdf. To order a hard copy send an e-mail to pnw_pnwpubs@fs.fed.us and ask for PNW-GTR-817. [Excerpted from Joan Cabreza, [Aquatic Invasive Species News in a Nutshell](#), September-December 2011]