



LOOKING AHEAD November-December

**WSU COWLITZ COUNTY MASTER
GARDENER PLANT AND INSECT CLINIC
FOR GARDEN QUESTIONS**

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WHAT'S IN THIS ISSUE

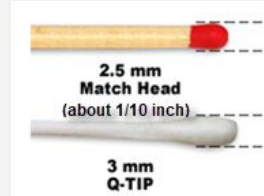
Start Here: OSU—Garden Tasks for [November](#) & [December](#)

- [Guide to Frequently Seen Home Pests](#)-and what to do if you see them!
- [Caring for Houseplants in the Winter](#)
- [Slugs](#)-and what to do about them
- [Winter Garden](#)
- [Lawn](#)-tips to keep your lawn healthy
- [Vertebrate pests](#)-moles, mice, voles, etc.
- [Resources](#)
- [Diagnostic Resources](#)

HOME/PANTRY PEST: DRUGSTORE BEETLE

<https://upload.wikimedia.org/wikipedia/commons/c/cd/Stegobium.paniceum.jpg>

- Adult drugstore beetles are very active and can be identified by their rapid skittering movement.
- The beetles are about 2.5 mm ($\frac{1}{10}$ inch) long,
- Light brown to red brown, cylindrical, and have humpbacks.
- Their bodies are covered with fine, silky hairs and distinct grooves in their wing covers.
- Feeds on most foodstuffs, animal products, certain drugs, and toxic materials; may perforate wood to access a food source.



<https://www.batzner.com/wp-content/uploads/2019/05/drugstore-400x400.png>

HOME/PANTRY PEST: CARPET BEETLES

- Adults (2-5 mm, $\frac{1}{16}$ - $\frac{1}{5}$ inch) deposit eggs on or near wool carpets, woolen goods, animal skins, furs, stuffed animals, leather book bindings, feathers, animal horns, whalebone, hair, silk, dried plant products, and other materials that can serve as larval food.
- Adults usually appear in spring or early summer; indoors, you'll often find them near windows.
- Very difficult to control: cleanliness and vigilance are the keys!
 - Eliminate the source.
 - Protect stored items—glass or plastic containers with tight lids.
 - [WSU Pestsense](#) —always try non-chemical control first. If that doesn't work call professional pest control.



<http://www.ipm.ucdavis.edu/PMG/IMAGES/A/I-CO-AVER-AD.002h.jpg>

GENERAL GUIDELINES FOR ALL PANTRY PESTS

- If you DO find a pest, locate the food source IMMEDIATELY, and get rid of it.
- CLEAN UP-vacuum crevices, scrub with HOT water and detergent.
- Food- including cardboard packaged food—tightly sealed containers.
- Pet food—tightly sealed container away from pantry.
- PREVENTION--Bulk grain products –2 options
 - 1.) Place items in a deep freeze for three to four days.OR
 - 2.) Heat the oven around 133 to 140 degrees F, introduce the food items and hold for 20 minutes.



SEASONAL TRESPASSERS



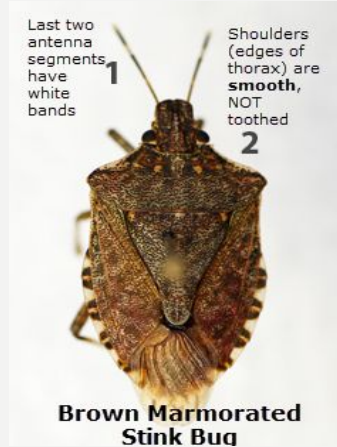
Boxelder Bug Life Stages

<http://greenthumbchronicles.blogspot.com/2008/02/boxelder-bug.html>



<http://andoverpestcontrol.com/images/west-co-nifer-seed-bug.png>

Western Conifer Seed Bug
7/8 inch
A "leaf-footed" bug)



Brown Marmorated Stink Bug



copyright, 2004 M. Potter University of Kentucky

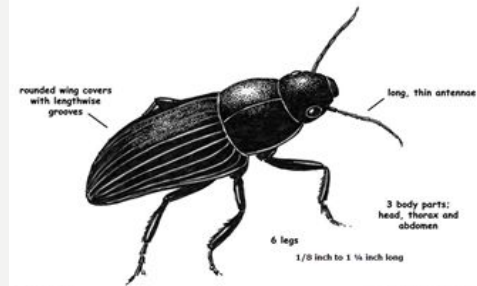
Asian lady beetles vary in color. Note the whitish area with M-shaped marking behind the head.



Earwigs

<https://www.agric.wa.gov.au/pome-fruit/management-european-earwig>

<https://www.Common-Black-Ground-Beetle-University/8424947420>

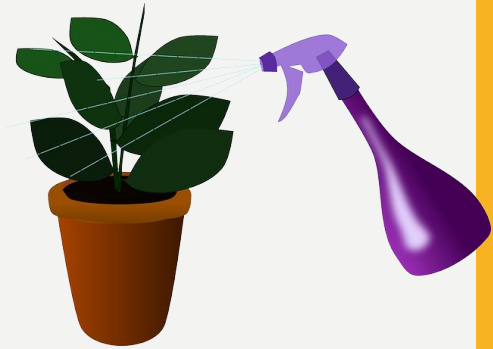


https://www.exploringnature.org/graphics/insects/beetle_ground_diagram.jpg

SEASONAL TRESPASSERS

- Do not store firewood indoors. Bring it in immediately before use.
- Install screens and other devices caulk potential outdoor entry points to keep bugs out of your house.
- Physically destroy the bugs. Be aware that this sometimes results in the emission of an objectionable odor.
- For large numbers of bugs on the outside of the house, you may spray with water or mixture of soap and water to knock them down.
- Vacuum bugs and dispose of the vacuum bag in the outside garbage.
- Expect to see them reappear on sunny, warm spring days. They will go into hiding again as the weather turns cold again.

KEEPING HOUSEPLANTS HAPPY IN THE WINTER



- **Feeding**

- Stop fertilizing in October, and resume in March.

- **Watering**

- Avoid overwatering—allow to dry out between waterings. More plants are killed by overwatering.
- Water thoroughly—when you do water, make it count. Use room temperature water, and slowly pour into the soil around the base of the plant until it drains from the bottom. Empty water saucer after 20 minutes.

- **Temperature.**

- Most houseplants like daytime temperatures between 65° and 75°, and night time temps between 60° and 65°. Keep them out of drafts.

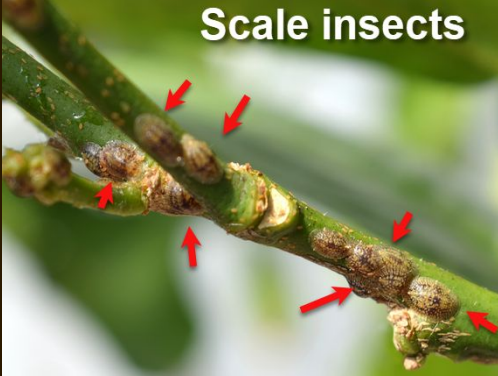
- **Light.** Most plants need bright light.

- Bright east-facing windows are great, but south or west windows with sun-filtering sheer drapes are also good options.

- **Humidity:**

- you can create a tropical island for them. Pour water into a shallow tray filled with pebbles so that just the top of the pebbles are above the water line. Place your pots on the pebbles.

Scale insects



Thrips--nearly invisible



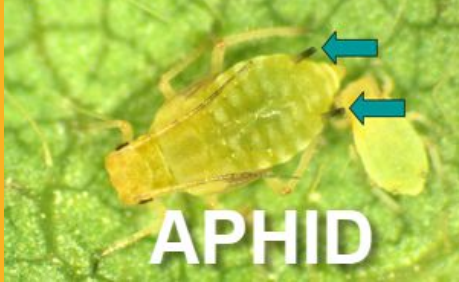
Whiteflies



What's eating my houseplant?

Sucking insects

APHID



Mealybugs



Spider Mites



HOUSEPLANT PESTS

SUCKING INSECTS

- [Thrips](#)
- [Spider Mites](#)
- [Aphids](#)
- [Whiteflies](#)

What to do

- Quarantine new plants.
- Be vigilant—inspect your plants often.
- Pinch or prune off worst branches.
- Spray with stream of water.
- Treat with neem oil or insecticidal soap.

HOUSEPLANT PESTS

SUCKING INSECTS

- [Scale](#)
- [Mealybugs](#)
- Both are sucking insects that are difficult to see and they suck the juices impair the plant's overall health.
- Yellowing wilting leaves.
- Sticky leaves.

WHAT TO DO

- Prune off severely infested branch.
- Wipe off with Q-tip dipped in alcohol.
- Use insecticidal soap.
- Use horticultural oils.
- Quarantine new plants.
- **INSPECT ALL YOUR PLANTS REGULARLY.**

HOUSEPLANT PESTS

FUNGUS GNATS

- Adult lays eggs in constantly damp/wet soil, eggs hatch, and larvae can eat the roots of tender young plants.
- Take affected plants outside, repot in fresh soil.
- To detect larvae, place 1/4 inch wedge of raw potato in soil. Check under slice for larvae.
- Allow top 2 inches of soil to dry out before waterings.
- Use a yellow sticky trap to reduce number of egg laying adults.
- Don't use chemical control on edible plants.
- Use chemicals as a last option:

<https://pnwhandbooks.org/insect/hort/greenhouse/greenhouse-ornamentals-fungus-gnat>



Figure 3: Fungus gnat on sticky card.

<https://extension.colostate.edu/docs/pubs/insect/insimg/Fungus%20Gnat%20on%20sticky%20card.jpg>



<https://extension.colostate.edu/docs/pubs/insect/insimg/Fungus%20Gnat%20larva%20on%20potato%20slice.jpg>

SLUGS - Mating Season Alert:

- Mating takes place between September and November.
- Eggs are usually laid in the soil and look like tiny translucent (1/8 to 1/10 in.) pearls.
- Set traps with beer in a shallow pan or place a board where you usually find them, then check under it in the morning and destroy them. Monitor every day for best results in lowering the population next spring. [WSU's Hortsense has more ideas](#), too.
- You also have the option of using a slug killer, but if you do, **use one with the active organic ingredient Iron Phosphate**. AVOID METALDEHYDE products—they are very toxic to pets and birds. Read the directions—more is NOT better. Protect yourself, other creatures, and the environment.



SLUGS--

- This is a list of organic slug bait/killer with iron phosphate that are labeled for use by homeowners in Washington. →
- For more information:
- <https://agsci.oregonstate.edu/slug-portal>
- <https://agsci.oregonstate.edu/slug-portal/education/q-questions-and-funnies>



WORRYFREE L/M FERRAMOL SLUG & SNAIL BAIT /ORGANI...	IRON PHOSPHATE (FEPO4)
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Source: <https://picol.cahnrs.wsu.edu/>

Putting your Garden to Bed:



Planning

Mow Low

Mulching

Cover Crops

Tool Repair/Sharpening

Removing Plants

Amending Soil

Lime

Covering Beds

Tool Stowage



https://www.canr.msu.edu/news/four_easy_steps_to_put_your_school_garden_to_bed

<https://s3.wp.wsu.edu/uploads/sites/2051/2017/09/Time-to-Put-the-Yard-and-Garden-to-Bed-for-the-Winter.pdf>

<https://pubs.extension.wsu.edu/home-lawns>

<http://pubs.cahnrs.wsu.edu/publications/pubs/fs111e/>



[Putting your Garden to Bed PowerPoint hyperlink!](#)

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Lawns:

Lawn care is a classic love/hate scenario. We love it in the spring and fall and hate it in the hot dry summers.

Lawns will seasonally ebb and flow in how they look and perform because of our climate and species selection.

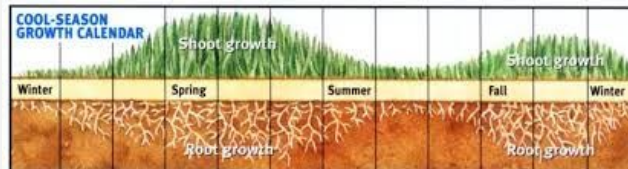
We can help them last and persist through tough times by:

- Properly fertilizing at the right times (Memorial Day, 4th of July, Labor Day and Thanksgiving).
- Encouraging growth when it is most needed.
- Managing weeds. Be aware of Annual Bluegrass [Annual bluegrass](#)
- Reseeding at choice times to rejuvenate the lawn.

Mowing frequency should match rate of growth. Do not remove more than 1/3 of the leaf blade in a single mowing and keep your mower blades sharp.

Aerating helps rejuvenate lawns and loosen soil to promote root growth, not to mention removing thatch annually will increase soil oxygen, water penetration and encourages grass root growth.

[Lawn Links](#)



Lawn Care Calendar

December-January	Avoid piling snow on turf areas, stay off frozen grass.
February	Stay off muddy grass areas. When not muddy, gently rake lawn to remove debris.
March	*Mow (0-2 times a month) Annual Grass Pre-emergent Control Dethatch, Moss control
April	*Mow (4 times a month), Moss control
May	*Mow (4-6 times month) Fertilize -Memorial Day (1 to 1.5 lbs/1000 SqFt), Broad-leaved Weed Control, Core Aeration, Overseeding, De-thatching (if > 3 inches thick)
June	*Mow (4-6 times a month), Irrigation (adjust for rainfall)--1 inch per week, divided into 5 sessions at 2/10 of an inch each time (will run off if more than 2/10 inch at a time)
July	*Mow (4 times a month) Fertilize-4 th of July (.5 to 1 lb), Irrigation (adjust for rainfall)--1 inch per week, divided into 5 sessions at 2/10 of an inch each time (will run off if more than 2/10 inch at a time).
August	*Mow (4 times a month), Irrigation (adjust for rainfall)--1 inch per week, divided into 5 sessions at 2/10 of an inch each time (will run off if more than 2/10 inch at a time)
September	*Mow (4 times a month) Fertilize Labor Day (.5 to 1 lb), Broadleaved Weed Control, Overseeding, Irrigation (adjust for rainfall)--1 inch per week, divided into 5 sessions at 2/10 of an inch each time (will run off if more than 2/10 inch at a time).
October	*Mow (2-3 times a month), Irrigation (adjust for rainfall)--1 inch per week, divided into 5 sessions at 2/10 of an inch each time (will run off if more than 2/10 inch at a time)
November	Fertilize Before Thanksgiving (1 to 1.5 lbs/1000 SqFt).

*Mowing-raise mowing height and increase frequency to maintain height of 2-2 ½ inches. Never cut more than 1/3 of the grass blade. Mulch grass clippings (leave on lawn) to add nitrogen back into soil.

- <https://catalog.extension.oregonstate.edu/sites/catalog/files/project/pdf/ec1278.pdf>
- <https://s3.wp.wsu.edu/uploads/sites/2071/2013/12/Lawn-Care-Calendar.pdf>
- <https://s3.wp.wsu.edu/uploads/sites/2062/2014/04/eb0482.pdf?x96359>
- Turfgrass management--EXCELLENT video! <https://www.youtube.com/watch?v=Yd9jC9KiTuM>

VERTEBRATE PESTS

In the Pacific Northwest there are numerous vertebrate pests that a gardener has to be aware of and plan to deter:

Birds, chipmunks, deer, elk, nutria, opossums, mice, moles, raccoons, rabbits, skunks, voles.

Great links to assist in controlling vertebrate pests:

- <https://wdfw.wa.gov/species-habitats/living/species-facts>
- <https://extension.wsu.edu/snohomish/garden/gardening-resources/vertebrate-management-links/>
- <http://pubs.cahnrs.wsu.edu/publications/pubs/fs094e/>
- <http://hortsense.cahnrs.wsu.edu/Search/MainMenuWithFactSheet.aspx?CategoryId=16&Problem=6052>
- <https://extension.wsu.edu/snohomish/garden/gardening-resources/principles-of-vertebrate-pest-management/>



Vertebrate Pests:

- <https://wdfw.wa.gov/species-habitats/living/species-facts>

Planning:

- <https://s3.wp.wsu.edu/uploads/sites/2073/2014/03/020714.pdf>
- <http://www.mgfk.org/education/growinggroceries/planning-design>

To Till or Not To Till: The choice is yours!

- <https://s3.wp.wsu.edu/uploads/sites/2073/2014/03/110912.pdf>
- https://wellfieldgardens.org/2019/01/11/high-till-low-till-no-till-until/?gclid=CjwKCAjwvtX0BRAFEiwAGWJyZLDjWLPZNeAKIqRWSXprmgah5Cmrr6UOr52yh-diGKuY2fsCKYNICBoChyAQAvD_BwE

When to Plant:

- <https://territoriaalseed.com/blogs/spring-growing-guides>
- <https://s3.wp.wsu.edu/uploads/sites/2071/2014/04/Home-Vegetable-Gardening-in-WA-EM057E.pdf>



YOU'RE NOT ALONE

- WSU Hortsense (E.g., search Google (e.g. for “WSU Hortsense apple”) That’s the easiest way. You can also go to the site: <http://hortsense.cahnrs.wsu.edu/Home/HortsenseHome.aspx> Always search for the singular, not the plural. “Apple” will get results, “Apples” will not.
- PNW Handbooks (E.g., search for “PNW Handbooks apple”) <https://pnwhandbooks.org/plantdisease/host-and-disease-descriptions> Always search for the singular, not the plural. “Apple” will get results, “Apples” will not. This site also has information for registered pesticide applicators. Only follow chemical advice for “Homeowners.”
- **And of course, you can get in touch with us at the Plant and Insect Clinic!**
 - Call: 360-577-3014 Ext. 8
 - Email: cowlitzmastergardener@gmail.com
 - Submit photos and problem on our website: <https://www.cowlitzcomg.com/plant-and-insect-clinic>
 - PM us on our Facebook page: Cowlitz Master Gardeners



DIAGNOSTIC RESOURCES

- **Hortsense:** <http://hortsense.cahnrs.wsu.edu/Home/HortsenseHome.aspx>
- **Pestsense:** <http://pestsense.cahnrs.wsu.edu/Home/PestsenseHome.aspx>
- **PNW Handbooks:**
- Insect Management <https://pnwhandbooks.org/insect>
- Plant Disease Management Handbook: <https://pnwhandbooks.org/plantdisease>
- Weed Management Handbook: <https://pnwhandbooks.org/weed>
-
-
- **WSU Plant Pest Diagnostic Clinics:**
- [CAHNRS Plant Pest Diagnostic Clinic, Pullman](#)
- [WSU Puyallup Plant & Insect Diagnostic Laboratory](#)
- **New Pest Alerts**
- [Gypsy Moth Quick Facts](#)
- [Brown Marmorated Stink Bug \(BMSB\)](#)
- [Spotted Wing Drosophila \(SWD\)](#)

IMAGE CREDITS

- Slide 10
- Thrips
 - https://www.missouribotanicalgarden.org/Portals/0/Gardening/Gardening%20Help/images/Pests/Thrips_Indoors1659.jpg
- Whiteflies
 - <https://s3-production.bobvila.com/slides/23477/widened/whiteflies.jpg?1508191364>
- spider mites
 - <https://www.salisburygreenhouse.com/wp-content/uploads/Spidermites-Feature.jpg>
- Aphids
 - <https://extension.entm.purdue.edu/fieldcropsipm/images/insects/soybeanaphid02.jpg>
- Mealybugs
 - http://www.missouribotanicalgarden.org/Portals/0/Gardening/Gardening%20Help/images/Pests/Mealybug_Indoors1398.jpg
- Scale
 - <http://homesteadbrooklyn.com/all/2017/1/17/common-insects-pests-on-houseplants>