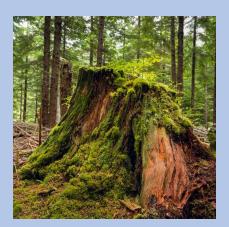
Chat with Chip

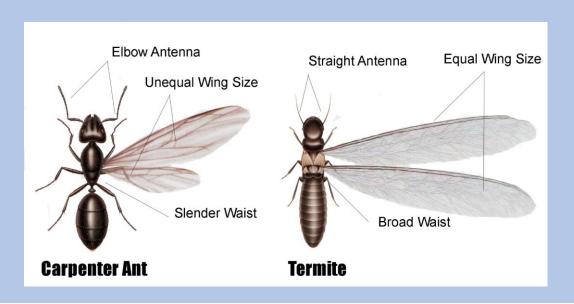
August 2021

Termites in August: Why you should <u>not</u> be concerned

- August evenings often feature winged termites flying at dusk, mostly on a day before some rain.
- We have two species, the western dampwood termite and the subterranean termite
- The "sub" termite is quite a bit smaller and generally flies, in smaller numbers, in July



Reproductive termite versus reproductive ant



Dampwood termite pictures from wildcolumbia.org



Left: Pacific Dampwood Termite (workers) – to 0.5". Brownish in color and fairly large. (photo © R.J. Adams)

Right: Pacific Dampwood Termite (soldier) – To 0.7". Like the workers but larger with a large head and formidable mandibles for defense. (photo © R.J. Adams)

Dampwood termite pictures from wildcolumbia.org



Pacific Dampwood
Termite (reproductive
adults) – To over 1"
long. Adults are large
and brownish. They
swarm during dusk in
late summer to early
fall. (photo © James
Bailey)

Subterranean termite pictures from wildcolumbia.org





Left: Western Subterranean Termite (workers) – To 0.2". Translucent white in color and smaller than dampwood termites. Can be found building mud tunnels to all kinds of wood. (photo © <u>Cat Kizer</u>) **Right: Western Subterranean Termite (soldier)** – About 0.4". Like the workers are creamy white in color, though with much larger and darker heads and more prominent mandibles. (photo © <u>Rich Hoyer</u>)

Subterranean termite pictures from wildcolumbia.org



Western Subterranean Termite (reproductive adults) – To 0.4". Adults are small and blackish. They swarm during the day, typically after rains. (photo © Rich Hoyer)

Subterranean termites

- They are sneakier and smaller than dampwood termites
- They can use moisture that moves from damp soil up to wood via a foundation crack. They also build moist-air mud based conduit tubes from the soil where there nest is up a post or foundation to wood.
- These are visible but crawling under a house to look for the tubes is a challenge. They can be on the outside of a foundation as well. Those are a lot easier to see. Treatment involves destroying the tube and killing the nest below the tube.



Termites, continued

- Dampwood termites are an elegant banquet for so many species including birds of all types, bats, alligator lizards, garter snakes, carnivorous insects like yellow jackets, tree frogs, spiders, and probably some mammals like skunks.
- When they get to the ground, they shed their wings and start looking for a suitable place to live.



But these are **DAMP**wood termites

- They need damp wood! They chew it and digest it with an array of micro-organisms. Their frass looks like brownish flour, fine and powdery.
- There is plenty of moist wood in forests. They are quite happy there and are part of the wood decay cycle.
- But precious little moist wood in homes unless...
 - You have moist dirt piled on part of your wood structure or
 - You have leaking plumbing
- We rarely need to treat for dampwood termites here. If there is a problem, fix the source of water and replace any damaged wood. Tenting a house is almost never done here.





Cabbage aphids

- Amazingly abundant this year
- Under kale leaves, tucked into cabbage,
- Plants sticky with their honeydew
- Growth distorted and slowed



Management of cabbage aphids

- May have overwintered in last year's kale that went to seed
- Fair number of predators
- Support some predators with alyssum or other flowers
- Row covers right from the beginning.
- Soap or other smothering aphid sprays are hard underneath leaves.



Photo: Jason Ballow Clemson Ext.

Late blight of tomatoes

- This has been an interesting tomato year. Generally good although we lost blossoms to the heat waves.
- But we need to be aware of any rain that will last more than one day. It can spell the end of the tomato season.
- Moist conditions create the perfect environment for late blight, a fungal disease for which we have little resistance in our tomato varieties.



Source: Biovison

Late blight, continued

- Potatoes affected, not eggplant and peppers
- Treat plants with copper before rain starts!
 Considered to be an "organic" fungicide.
- It will save many varieties although some are very susceptible and will still succumb.
- It looks like a blow torch hit the plants and the fruits will turn hard and glassy and then rot.
- It caused the Irish potato famine in the 1840s. Potatoes also affected.



Powdery mildew

- This is also the season for powdery mildew. It doesn't like rain but does like high humidity.
- It shows up on a huge number of plant species.
- Each species generally has its "own" powdery mildew so it won't spread to other species.
- Most affected in edible garden: grapes (earlier) and squash family. Lots of ornamentals (roses, lupines, and many more) also affected.



Lupines with powdery mildew PNW Handbook

Natural silver color pattern in zucchini vs. mildew



Natural pattern



Powdery mildew

Photos: Carl Wilson

Powdery mildew management

- Buy resistance (a continuum) when you can. That is by far the best approach.
- The right spacing to avoid shading
- Try pre-emptive sprays based on the timing you have noted in the past.
- Organic choices: copper, sulfur, sodium bi-carbonate, milk (?)





Photos: T. Zittter, Cornell

Two ornamental flowers for bees: some dahlias and some sunflowers

- We breed plants for human uses, often ignoring their potential ecological value.
- This has been especially true of ornamental flowers. Double and triple flowers are impossible for bees to get to the juicy bits.
- It also turns out that some sunflowers don't shed pollen because they don't make pollen. Pollen might get the table cloth "dirty".
- What can we do for the bees? Plant native plants they love (for bumble and other native bees) and breed ornamentals that give honey and other bees something to utilize.

Original dahlia types

- These are called open-flowered dahlias
- The pollen and nectar is easy get to.
 The Pompom and other closed tight types have curious bees but no customers.
- Bumblebees are very fond of dahlias but there are other small native bees and honeybees that work them as well.





Sunflowers with pollen (and bee value)

- It turns out that, as with many hybrid plants, they have sunflower
 pollen shedding breeding lines (male fertile) and female lines that are
 male sterile (no pollen). The field row ratio is about 6 to 1 of female
 rows vs. male rows.
- Some bees will gather nectar from the female lines, others are pollen specialists and need pollen. The smaller bees do both on the same trip.
- So, for the bee friendly garden, it makes sense to grow varieties that are not hybrids but have both pollen and nectar in the same flowers. These are called "open-pollinated" sunflowers.
- Here is a good article: https://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=29486

Open-pollinated sunflower varieties that are bee friendly

- Lemon Queen
- Mammoth Grey Stripe
- Black Russian
- · Giant White Seeded
- Henry Wilde
- Autumn Beauty
- Chocolate Cherry
- Evening Sun
- Sonja
- Red Sun
- Maximillian
- Velvet Queen



Lemon Queen above; Chocolate Cherry to right



Weed (and food?) of the month: Purslane

- This is an interesting weed that is now spread (by humans) over most of the world.
- Evidence for presence in pre-Columbian North America
- Looks like a flattened tiny- leafed jade plant. Small yellow flowers.
- It is a seed prolific annual. Seeds won't germinate until soil temps reach ~60°F. Grows quickly with sun and water. Very competitive with small seeds.



Purslane 2

- Purslane has been looked at for a "living mulch".
- Deeply rooted for such a small plant.
- Fast growing but flattened to the ground
- Provides soil temperature shading and may transport water up to other plants.
- Has to be used only around larger crops like corn, squash, etc.





Upper photo: Ken Moore; lower photo: Mtn. Valley Seed

Purslane cont.

- Found in Latino grocery stores in big bunches called verdolaga.
- Mostly eaten raw in salads.
 Slightly acidic and slightly salty at same time
- Very high in a key omega-3 fatty acid called alphalinolenic acid.



Does mole and gopher spurge work?

- What do we have, moles or gophers?
- We have moles (and voles) but no gophers. Why is a bit of a mystery. Clatsop is gopher free; so are Wahkiakum and Pacific counties. Tillamook has a few and so does Cowlitz and Clark counties in the Cascade foothills.
- So, on to mole/gopher plant.



Mole or gopher plant: Euphorbia lathyris

- European import and now naturalized in Oregon.
- Spreads by seeds
- Life cycle a bit confusing. Most say biennial. Some say shortlived perennial.
- Drops seeds (50 or more per plant from top "fruits".
- It can be invasive.



More mole plant

- This plant has, like most euphorbias, a white latex in its stem that is quite dermally and internally toxic.
- There are some medicinal uses, though not with much backing efficacy data.





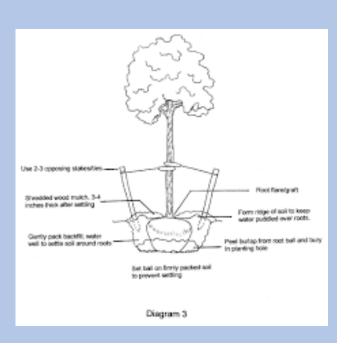
Finally, does it work?????

- It does not, according to most accounts, stop either moles or gophers.
- No scents do except "essence of weasel" (don't ask).



Planning to transplant

- Time to prep beds or specific areas for fall transplanting
- Water the area so it can be worked
- Dig up a space 2x+ the root ball widths (estimate).
- Add some high quality compost
- Possible cover or lightly mulch
- Transplant when trees are dormant or, for evergreens, when we have cooler days and rainy periods
- Coarse mulch on top of soil after planting.



Hazardous waste collection day coming

- Saturday, August 28th from 8am to 2pm at the Transfer Station in St. Helens at 1601 Railroad Avenue
- Will take household quantities of pesticides, paints and stains, cleaners, old oil, brake fluid, etc.
- For details, go to
 https://www.columbiacountyor.gov/departments/Soli
 dWaste/household-hazardous-waste-1