

Natter's Notes

Wildfire Smoke & Ash in the Garden

Jean R. Natter

As I write this in early September, fires are raging in much of Oregon and air quality ranges between unhealthy and hazardous due to nearby fires or at a distance by smoke plumes. Unfortunately, due to turn around time for the metro MG Newsletter, you won't receive this advice until long after it is the most useful. But perhaps, during a future event, you'll recall the most critical guidelines to help protect you and yours.

Perhaps the single best one-stop link for info is <https://www.airnow.gov/> where there's nearly endless info under the headings of Air Quality Information (AQI) & Health; Fires; Maps & Data; Education; International; and Resources.

When the Home Page opens, click "Allow Location Access" to receive an air quality rating from the sensor closest to where you live.

Let's review a number of other helpful links about smoke, health safety, and gardening.

The risks of particulate matter in smoke

"Particulate matter contains microscopic solids or liquid droplets that are so small that they can be inhaled and cause serious health problems. Some particles less than 10 micrometers in diameter can get deep into your lungs and some may even get into your bloodstream. Of these, particles less than 2.5 micrometers in diameter. . . pose the greatest risk to health."

(https://www.cdc.gov/disasters/covid-19/wildfire_smoke_covid-19.html)

Note that only an N95 mask or respirator will protect your lungs from the smallest particles in wildfire smoke.

- Guidelines for working indoors or outdoors

Wait until the air quality reaches healthy levels to begin cleanup because disturbed ash particles can enter, and damage, your lungs.

- Ash disposal

"Collected ash may be disposed of in the regular trash. Ash should be stored in plastic bags or other containers to prevent it from being stirred up. If you suspect hazardous waste, including asbestos, is present, contact

your local hazardous waste authorities regarding appropriate disposal. *Avoid washing ash into storm drains.*" (<https://www.airnow.gov/publications/wildfire-smoke-guide/wildfire-smoke-protect-yourself-from-ash/>)



Info-graphic source: 2020; <https://www.ourair.org/ash-cleanup/>

- **What should I do about wildfire ash covering my yard and garden:** ". . . a thin dusting of ash on plants (can still see the green color) isn't likely to have long term effects on plant health before our fall rains wash it away, so no need to remove.

"Focus instead on clearing heavier amounts of ash from plants that you regularly come into contact through gardening activities, that are near windows, doors or air

handling units, food producing plants, or plants that are of high value to you.

“Don't wash the ash down the storm drain. Instead direct the rinse water into low traffic grassy or ornamental areas (away from your fruit & veggie garden) which will act as a natural filter. Large amounts of ash can be gently swept into a pile, bagged in plastic sacks, sealed, and thrown away “

<https://extension.oregonstate.edu/ask-expert/featured/what-should-i-do-about-wildfire-ash-covering-my-yard-garden>)

- Take precautions when wildfire ash lands on fruits and vegetables: “Avoid going outside to harvest while smoke lingers.” Rinse twice, once outdoors and again in the kitchen sink. If the produce is near a burned building, potential health-affecting toxins may be present. Peel produce like tomatoes, apples and root crops and strip the outer leaves of lettuces and other greens. For a more thorough cleaning, soak vegetables and fruits in a 10% white vinegar solution (one teaspoon vinegar to three cups water), which can lift soil particles off vegetables like kale, Swiss chard, savoy cabbage and fruit like peaches, apricots and nectarines.”

<https://today.oregonstate.edu/news/take-precautions-when-wildfire-ash-falls-fruits-and-vegetables>)

- Indoor Air Filtration: If you have central air conditioning, turn the control to “fan.” If you lack central air, consider a portable filter; the best kinds use HEPA filtration. (<https://www.consumerreports.org/air-purifiers/best-air-purifiers-for-wildfire-smoke/>)

- Backyard Poultry in Fire-Affected Areas (UCCE; 2017): “In addition to all the destruction and inhalation of smoke associated with the recent fires in Northern

California, one of the unfortunate legacies remaining are chemical contamination of land, soil and water. . . . Since backyard chickens are food animals with respect to egg and meat production, there is a risk that some of these substances may be ingested by chickens and deposited inside eggs which are then laid by the chickens. . . . Unfortunately, there *is limited scientific data on this issue. . . .*”

At the time of this blog entry (2017), UCCE had several stringent recommendations concerning backyard poultry, including lab testing of the eggs. (<https://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=25700>)

- Produce Safety After Urban Wildfire (UCCE; 2018): “Plant samples DO NOT show extensive contamination of produce exposed to wildfire smoke, and our findings suggest a low health risk from ingesting produce exposed to wildfire smoke.” (<https://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=28737>)

- Safe Ash Clean-Up After a Fire: The greatest risk is from tiny invisible dust particles. Avoid cleaning up until air quality improves and it's safe to be outdoors. (2019; <https://www.ourair.org/ash-cleanup/>)

- Fire Recovery Guide: What to do with your land after a wildfire. (California Native Plant Society; 2019; <https://www.cnps.org/give/priority-initiatives/fire-recovery>)

- How to stay safe in a smoky pandemic: A Q&A. (<https://www.opb.org/article/2020/09/14/how-to-stay-safe-wildfires-pandemic-oregon-air-quality-masks/>)

###