



EAC Nature News



Brought to you by:
The Charlestown Township Environmental Advisory Committee (EAC)
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The holidays are over, the winter doldrums are here.
We can't avoid mother nature so let's keep the cheer.

Let's do what we can to avoid the winter blues.
Like enjoying warm and comforting soups and stews.

Have a fire, wrap yourself in a blanket and read a book.
Stay warm and cozy in your own little nook.

Have fun on your skis, skates, snowboard, or sleigh.
The winter is still beautiful in its own way.

Taking walks along beautiful routes.
Crunching the snow in your warm winter boots.

The winter seems quieter than the rest of the year.
Nights are long, days short, before you know it spring will be here!

DRAFT

MISSION

The Charlestown Environmental Advisory Committee's (EAC) mission is to advise the Board of Supervisors on environmental issues, the protection and preservation of natural resources, the use of open land and creating inventories of natural areas with unique features. All aforementioned advice to be focused within the township and in the best interest and general welfare of its residents.

You are receiving this email because at some event or activity or through networking you signed up to be on the Charlestown EAC mailing list. Please feel free to share this with others who might be interested in future volunteer activities. To see the EAC's annual meeting schedule go to [Charlestown Township](#).

- *If you are passionate about the environment in which we live, consider becoming a member of our EAC. Contact us at eac@charlestown.pa.us.*

HAPPENINGS

- Our Regular monthly meetings are open to the public. Please join us on the second Monday of the month at 7:00 p.m. in our new township office, 11 Warren Blvd. Malvern.

- Charlestown Township is now officially a **BIRD TOWN!** Check out the *Bird Beat*, the quarterly Bird Town community eNewsletter. Community members can sign up to receive it. <https://constantcontactpages.com/su/Rh6gEGx>. Kudos to all who spent time on this effort led by Pete Goodman.
- Valley Forge Trout Unlimited studies salt pollution in our local streams and the results are surprising. Learn more at <https://www.valleyforgetu.org/resources/whitepapers/road-salt/>.

THINGS TO KNOW

Learn about timely township news and notifications by signing up for the Charlestown Township weekly email. <http://www.charlestown.pa.us/updates.aspx>.

Our focus this issue is on environmental health and safety at home and at work.

There are claims that our homes and our cars are chemically toxic environments. A chemically toxic home contributes to a chemically toxic environment, namely our water, soil, and food.

<https://www.cdc.gov/nceh/publications/books/housing/cha05.htm> states that; “In the last several years a growing body of evidence has indicated that the air within our homes and other buildings can be more seriously polluted than outdoor air in even the largest and most industrialized cities.”

Consider the following:

1. Americans spend more than 50% of their time at home.
2. Indoor pollution contributes to outdoor pollution.
3. Incidences of respiratory illness such as asthma have increased.
4. Children and pets are more susceptible to the negative impacts of home contaminants.

There are several types of indoor pollutants.

1. Biologic – bacteria, mold, viruses, animal dander, dust mites to name a few.
2. Chemical – carbon monoxide, smoke from cigarettes, cigars, grills, etc., VOCs (volatile organic compounds) such as paint, varnish, waxes, stains, household cleaners, glues, and adhesives, radon.
3. Pesticides and insecticides.
4. Toxic building materials such as asbestos, lead, arsenic.
5. Microplastic particles and fibers in the air and on our food is almost a third of all of our indoor dust.

There is also an illness called Sick Building Syndrome defined as a condition typically marked by headaches and respiratory problems from being in poorly ventilated buildings.

Like all the articles covered in Nature News, there is a mountain of information regarding the topic. This one is no exception. So, to be as pertinent as possible, this expos will focus on toxins that are common to all of us. Some references will be provided at the end for more information and the CDC reference manual provided in the above link has a wealth of information.

1. Biologic

We are well-conditioned to handle these dangers from our time spent dealing with COVID. The most important tips are:

- a. Wash your hands frequently for 20 sec. using hot water if possible.
 - b. Vacuum your carpets and have them shampooed regularly, especially if you have pets.
 - c. Avoid cross contamination when cooking or preparing food, especially meat and poultry.
 - d. Clean mattresses and pillows naturally rather than throwing them out. Reference provided at the end of the article.
 - e. Use natural solutions to eliminate mold, viruses, and bacteria. Try soap and water first. Use bleach in a dilute solution only when necessary. DIY mixtures are well documented, and they work!
2. Pesticides and Insecticides – avoid using chemical insecticides and pesticides to try to get rid of insects or plant diseases. Rodents hate peppermint oil so try placing this oil around problem areas. Try using localized traps, for example, sticky traps for fruit flies and ants.
3. Chemical – this is by far the largest group relative to what we use to keep our houses, cars, work areas etc. clean. Traditional household cleaners, paints, and varnishes contain VOCs, organic molecules that vaporize and become gases at room temperature. Common household VOCs are toluene, styrene, xylenes, and trichlorethylene. These compounds have been linked to childhood illness, endocrine disruption, dangers to pregnant women, and neurological problems. Another very commonly found VOC is formaldehyde, which is used in pressed wood products, preservatives in paints, cosmetics, coatings used for permanent-press quality in fabrics and draperies, and the finish on paper products and insulation materials.

Enough about the problems. Let's move on to solutions that help minimize these dangers in your home or workplace. The list below is certainly not comprehensive but hopefully provides a good foundation.

- a. Laundry – use an eco-detergent – there are many on the market today. Avoid bleach, dryer, and washer sheets. They are not required. Make your own stain removers for clothing and carpets/upholstery. You can use hydrogen peroxide directly in your washer rather than buying commercial oxy products.
- b. Cleaning products for kitchen and bathroom including mirrors and glass – Before using harsh chemical products, try DIY cleaners using combinations of baking soda, vinegar, alcohol, hydrogen peroxide, magic eraser, tea tree oil, and other natural cleaners such as Castille soap. For example, for granite or other stone, use a mixture of ½ cup isopropyl alcohol, a few drops of dish soap and water. You can add essential oils to improve the smell if desired.
- c. The best cleaner for wood is a dilute mix of soap and water or vinegar and water. Use a soft cloth that is just dampened with this mixture.
- d. Keep plants in your home – plants clean the air of toxins and greenhouse gases and have the double benefit of being beautiful. See Web MD reference.
- e. Toss any makeup products older than 6 months. Buy only what you will use up in the next six months and buy 'clean makeup'. Usually, clean makeup is marked as such. Clean makeup brushes in warm soapy water frequently.

- f. If you choose to wash your fruit and veggies, use a plant based cleaner or a drop or 2 of Castille liquid soap in water.
- g. Replace air and water filters as recommended. Although you will have to toss old ones, your systems will work more efficiently with clean filters.
- h. Dispose of latex-based paints more than a couple of months old. Most landfills won't take these unless the paint itself has hardened in the can. You can leave them uncovered in the sun on a warm day to harden. For non-latex paint, check the Chester County web site for how to dispose of these and all other toxic solvents such as acetone, benzene, xylene etc. If you have lead paint in your home, it may be helpful to have your home evaluated for lead levels. The same is true for any concerns about mold and asbestos.
- i. This may be an expensive proposition but consider removing old carpeting and replacing with wood, vinyl, tile floors. These are easier to clean and disinfect and avoids chemicals used in the carpet-laying process. Ask installers what chemicals are used to lay your floor. Which brings up a good question to keep in mind for all changes you make in your home – ask lots of questions about what substances are used. This applies to service providers such as carpet cleaners, power washing contractors, and home builders/contractors. The same comment applies to fabric window coverings. They are hard to keep clean. Shades and blinds are good replacements and easier to clean.
- j. Have a functional carbon monoxide (CO) detector in your home as well as working smoke detectors – carbon monoxide replaces oxygen in the air causing asphyxiation if levels get too high. CO is invisible and has no odor.
- k. Carefully dispose of medications and other pills. The goal is to avoid these getting into water supplies.
- l. Dispose of windshield washing fluid, antifreeze, car wash products properly and do not store these indoors. Buy only what you need. Don't keep extra on hand.
- m. Consider eliminating all de-icing products. They are causing harmful salination of our water and soil, killing wildlife and fish. Ask yourself how much good they are really doing? If you do use these products, be very judicious with how much you use.
- n. Be judicious about any burning in your home via candles, fireplaces, grills etc. These all emit fumes that contain toxins.
- o. Practice preventative maintenance by reducing or eliminating the plastics via clothing, fabrics, food, and packaging into your home. At the very least start to become aware of what you have in your home that is problematic.

BONUS TOPIC of the month: Winter Beauty

Did you know that some plants have 3 or even 4 seasons of interest? It turns out that most blueberry bushes have red stems which stand out, especially in the snow. There are many plants that have interesting stems (red-twigged and yellow-twigged dogwoods), interesting bark (river birch and shagbark hickory), and berries (winterberry shrubs win for longest lasting berries).

If you didn't do a fall clean-up, little critters say 'thank you'. Seeds, berries, and seed pods are very attractive to our smallest critters. Stalks and stems may not look attractive right now, but there are many species that

deposit their eggs in the hollow stems or hibernate in the stems and/or on the leaf litter. The rule of thumb for protecting them is to leave your stalks and stems until there is a full week of temperatures over 50 degrees. Once the weather is consistently over 50 degrees, the hibernators will evacuate, and the eggs will catch. If you cut those stalks down before that, their residences are destroyed!

<https://georgeweigel.net/georges-current-ramblings-and-readings/10-trees-with-interesting-peeling-or-flaking-bark>.

<https://extension.psu.edu/native-plant-spotlights-for-wildlife-friendly-landscaping>.

Suggestions of the month:

Please be aware of your municipal waste company's policies about recycling. Here are some tips that apply to all and must be followed if you want to ensure your recycling doesn't end up in a landfill.

- Do not put your recycling in plastic bags which are not recyclable. Put your recyclables directly in the bin.
- Understand what plastic your waste disposal company allows to ensure your recyclables are treated as such, follow their guidance.
- Make sure everything you put in your bin is recyclable. It only takes a couple of minutes to educate yourself on what is allowed. If everything you place in the bin is recyclable except 1 item, your entire bin might be put into the trash.
- Make sure recyclables are clean of food and other substances and are dry.
- The recycling arrows on all plastics are misleading. Just because a container has a 1 or 2 rating, doesn't mean it is recyclable. Again, it is important to check both your township ordinances and your trash/recycling hauler's rules.

“The objective of cleaning is not just to clean, but to feel happiness living within that environment.” — Marie Kondo

“One kind word can warm three winter months.” — Japanese proverb

References

https://www.sustainablejungle.com/zero-waste/zero-waste-cleaning/?utm_source=newsletter&utm_medium=email&utm_campaign=our_guide_to_non_toxic_sustainable_cleaning&utm_term=2022-10-19
http://www.charlestown.pa.us/misc_docs/recycling_ordinance.pdf
<https://www.epa.gov/indoor-air-quality-iaq/indoor-pollutants-and-sources>
<https://www.who.int/news-room/fact-sheets/detail/household-air-pollution-and-health>
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5089137/>
<https://ww2.arb.ca.gov/resources/documents/indoor-air-pollution-cooking>

<https://www.cpsc.gov/Safety-Education/Safety-Guides/Home/The-Inside-Story-A-Guide-to-Indoor-Air-Quality>

Learning opportunities in the winter:

Jenkins Arboretum <https://www.jenkinsarboretum.org/events1/>

Scott Arboretum: <https://www.scottarboretum.org/education-events/adults/>

Tyler Arboretum: <https://www.scottarboretum.org/education-events/adults/>
<https://tylerarboretum.org/calendar/>

Tyler Arboretum is offering a nature series for children that you can do with your children or grandchildren: <https://tylerarboretum.org/forensic-investigator-series-2/>

Longwood Gardens: <https://longwoodgardens.org/education/continuing-education>

Mt. Cuba Center: <https://mtcubacenter.org/programs/>

Morris Arboretum: https://www.morrisarboretum.org/events_special.shtml

John James Audubon Center: On-line Learning <https://johnjames.audubon.org/visit/online-learning>

Ladew Gardens: <https://ladewgardens.com/Learning/Learning-for-Adults>

March 11: Garden Wise: An Annual event sponsored by the York County Master Gardeners
<https://extension.psu.edu/gardenwise> (registration required)

March 18: March Into Spring: An Annual event sponsored by the Mid-Atlantic Hardy Plant Society
https://www.hardyplant.org/index.php?option=com_events&task=icalevent.detail&evid=303
(reservation required)

York Conservancy Seedling Sale: <https://www.yorkccd.org/shop>



Figure 1 Potentially harmful toxins.



Figure2 Winter Blooming Pieris Japonica