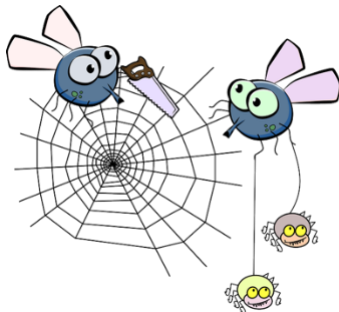




Ahhhh...Summer. Hot weather, flowers in bloom, outdoor activities and barbecues! Oh and bugs.... (see below for our main topic of this issue).



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 of the 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](#).

RECOGNITION

- Thank you to everyone who participated in Earth Day cleanup activities. We gave away an eco-friendly gift basket to the Bill Longue family.
- We held a virtual community presentation on the Reduce->Reuse->Recycle lifecycle. The focus was on composting. For a copy, go here: http://www.charlestown.pa.us/misc_docs/2021_eac_reduce_reuse_recycle.pdf
- The riparian buffer around the natural spring in the Deerfield Development open space had its last trees planted for the season in June. Thanks to all who participated.
- Thank you to the volunteers who came out in the hot sun of May to enhance habitat at Brightside Farm Park. Funded by the National Fish and Wildlife Foundation (NFWF), Project Wingspan is a 3-year landscape scale project to improve habitat for the threatened Monarch Butterfly and Rusty Patched Bumble Bee, both of which used to be common and now are in steep decline. Project Wingspan was made possible by the Pollinator Partnership of nonprofits, the U.S. Fish&Wildlife Service, and many others. The EAC of Charlestown applied to participate in planting native pollinator wildflowers at Brightside Farm Park to benefit a nine-state Midwestern region with Pennsylvania at the eastern end. We were selected to receive 300 free pollinator native flowers and shrubs to be planted in upland meadow, wetland, and woods edge. It will take the plants a year or two to get established, but in the long run, they will enhance the natural lands at

Brightside for the many species who depend on natural habitats to



survive.

Tom Pizzuto and his daughter of Charlestown

HAPPENINGS

Environmental Activities Coming Up

- Girl Scout Troop #4347 and their leader, Joanne Tidwell, are working on a Take Action project for community service work which is a culmination of three badges on environmental topics. Because pollinator species have been particularly affected by human behaviors, the Troop is focusing on expanding pollinator habitat. Charlestown Park is being considered for their service work with the EAC, to be completed sometime this year.
- Charlestown Day: Saturday, September 25th. Stay tuned for more information.
- Education Series - "Guess Who's Coming to Dinner"? It's not just about pretty gardens anymore, it's about using productive plants to save our pollinators. In creating your own homegrown national park, you will quickly notice how many more species of birds, butterflies and bees visit your garden.

August 18th at 7:00. Location is TBD but hopefully will be IN PERSON!

ONGOING

Watershed Certification - You can certify your property as Watershed Friendly, including signage, at [Certify your Property | Nurture Nature Foundation](#). Remember to have supporting pictures ready when you complete the application form. Contact Carol Armstrong for more information if needed (mnem.np@gmail.com).

Pollinator Certification: You can certify your property as a Pollinator Garden, including signage at: <https://extension.psu.edu/certify-your-pollinator-friendly-garden-handout>. Remember to have supporting pictures ready when you complete the application form.

Plant Sales for fall:

- Hardy Plant Society's sale in August: <https://hpsmag.memberclicks.net/fall-gardeners-market>
- Jenkins Arboretum
- West Chester Growers Market- Gay and Chestnut Streets in West Chester
- Friends of Heinz Refuge native plant sale, September 25 as part of the Fall Festival at the John Heinz National Wildlife Refuge. Benefits the Wildlife Refuge. Ordering information to be announced.
- Mt Cuba Center: <https://mtcubacenter.org/action/plant-selections/>

Featured Topic: PESTS ON OUR DECKS (and yard, patio, etc....)

Note: This article specifically deals with living in harmony outside with pests and does not discuss issues with indoor infestations or large agricultural operations.

For some background, provided below are some interesting facts about insects (courtesy of the Smithsonian Institute):

- Recent figures indicate that there are more than 200 million insects for each human on the planet! A recent article in The New York Times claimed that the world holds 300 pounds of

insects for every pound of humans.
(<https://www.si.edu/spotlight/buginfo/>)

- 900 thousand different kinds of living insects are known. This approximates 80 percent of the world's species.
- At any time, it is estimated that there are some 10 quintillion (10,000,000,000,000,000,000) individual insects alive.

Are insects friends or foes when we are trying to enjoy the outdoors? The answer is that they are both. We need insects for our ecosystem to survive. We all know that it is a hierarchical chain of predation. The tiniest insects may be food for birds and other insects or animals. So, for the most part, we need to protect the insects so that humans don't alter the natural order. If we destroy insects, species further up the food chain will starve and so on and on.

On the other hand, insects such as flies, ants, bees, gnats, ticks, beetles, and mosquitos are annoying and can be destructive or disease carriers, making it a battle of the species.

The goal is to protect the insects/bugs/birds while distracting them from attacking us.

The balance of nature depends on the activities of parasites and predators, the majority of which are species of insects. Researchers use this concept in biological control, and have been dramatically successful in many programs.

For the good of our health—and that of our planet—scientists say we need to reconsider our dependence on synthetic pesticides. Since they came into widespread use after World War II, these toxic chemicals have seeped into 90 percent of our streams and rivers. The U.S. Centers for Disease Control and Prevention says Americans now have an average of 43 different pesticides in their bloodstreams. These are chemicals that can trigger all kinds of medical problems (nrdc.org, 2016).

A better solution whenever possible is called IPM or Integrated Pest Management. Most insects are harmless and can be left alone outside. Silverfish, for example, may be annoying, but they don't present real health risks. Most insects that bother us in summer are still important to our ecosystems, e.g. flies and bees so IPM should be used to manage them in your space but do not kill them or apply pesticides. A great resource is <https://www.northeastipm.org/ipm-in-action/ipmresources/all-resources>.

Below is a list of Do's and Don'ts for discouraging insects from bothering us.

DO these things when you are outside in an area where you will be competing with insects:

1. Turn off lights where you are sitting.
2. Eliminate standing water in the area and make sure your gutters are clean.
3. Cover your trash and recycling containers and move them away from your yard's prime entertaining spots.
4. Use a box or other portable fan to create moving air where you are sitting.
5. Attract birds with bird feeders.
6. Burn incense nearby, or carry it when hiking or walking.
7. Spray peppermint and other herbs/oils where you are sitting.
8. Plant peppermint, spearmint, basil, or citronella herb plants. Also consider planting bug-repellent plants in your garden. Lavender, marigold, chrysanthemum, and lemongrass, among others, are all known to repel a host of insects from mosquitoes to aphids.
9. Wear long-sleeved tops and pants.
 10. Keep food out of the area or tightly covered.
 11. Wear Insect netting over a cap or brimmed hat, and over shirts, shorts/pants.
 12. Keep an electric fly swatter around for lantern flies.
13. Enlist an army of beneficial bugs. It all starts with encouraging the good guys to stick around, even in the off-season, by putting up an [Insect Hotel](#).
14. Try essential oils such as cinnamon, peppermint and lavender.

DON'T do these things when you are outside and competing with insects:

1. Light a citronella candle which, when burned, is toxic to animals when inhaled or eaten by accident. It is widely reported that citronella candles do not produce enough citronella to repel mosquitoes effectively.
2. Use pesticides.
3. Kill the native solitary bees and wasps. We need them. Learn to coexist with them if they are not directly impinging on your area. If you don't threaten them, they won't sting you.

Suggestions of the month: submitted by Sharon Richardson

- Plant a native tree <https://www.arboday.org/>
- Consider taking a piece of your lawn and converting it to meadow. <https://extension.psu.edu/meadows-and-prairies-wildlife-friendly-alternatives-to-lawn>.

- Deadhead perennials <https://extension.psu.edu/programs/master-gardener/counties/chester/how-to-gardening-brochures/deadheading-1>

Note: Don't deadhead plants that produce food or habitat for pollinators: <https://extension.psu.edu/programs/master-gardener/counties/lackawanna/news/2015/deadheading-helps-next-season2019s-flowers>.

- Plant fall-bloomers <https://extension.psu.edu/best-plants-for-pollinators>
- Walk walk walk and observe other homes and conservancy gardens. You can get great ideas (bring a camera!)

"Rest is not idleness, and to lie sometimes on the grass under trees on a summer's day, listening to the murmur of the water, or watching the clouds float across the sky, is by no means a waste of time.

John Lubbock