



Henderson County Master Gardeners Weekly News Article December 31, 2018

Bugpocalypse By Lydia Holley

There is something going on in the world of bugs. Actually, there is something going wrong in the world of bugs. Which means, something is going wrong in the world.

Studies are beginning to show the bug population is dropping so low, scientists are now calling it a “bugpocalypse” or “insect armageddon”. The problem is worldwide, and studies are pouring in. It started with a Denmark study of tracking the splats on a windshield. The studies then increased in size and scope. A study done in conjunction with Aarhus University, the University of Copenhagen, North Carolina State University and the Natural History Museum of Denmark in a German nature reserve showed decreases in flying insect populations by 75 percent over 27 years. The Krefeld Society in Germany announced that in one reserve, insects had decreased almost 80 percent over 24 years. A study in the El Yunque rain forest in Puerto Rico found a shocking difference in 36 years: whereas once 473 milligrams of bugs were caught, now the catch rate was only 8 milligrams.



Fish, birds, frogs, lizards and other animals that rely on insects for food has declined, also. One study found that some of these species have declined on average by 45 percent. Eighty percent of the partridges have disappeared from French farmlands. Over the past 30 years, farmland birds in Europe have decreased by 50 percent. Nightingales dropped 50 percent while turtledoves dropped 80 percent. The Puerto Rican tody, a bird, has declined by 90 percent. These birds eat mostly insects as their food source. In contrast, the ruddy quail dove had no population change; it eats fruits and seeds.

So what is happening to our bugs? No one knows, of course. Most scientists believe a number of factors come into play. Some are beyond our control. But there are some things the average gardener can do to help out.

The first thing is to realize you do not have to kill a bug just because it is eating your plants. The second thing is to stop using chemicals in your garden. Try to provide a haven for frogs, lizards, caterpillars and insects. The third is to plant native plants. A recent study on Carolina chickadees showed that bird populations dwindled unless landscapes had at least 70 percent native plant biomass. The scientists felt Carolina chickadees made a good representation for most insect-eating birds.

If you think about it, increasing native plants makes sense. Insects need plants to eat; they choose native plants. In order for them to sustain their populations (and to have enough insects to sustain birds, fish, frogs, lizards, and other populations), native plants are imperative. Of course, planting native plants only helps if you do not use chemicals which hurt the insects you are trying to attract, and do not kill insects which may need your plants to survive.

According to an article published at smithsonianmag.com, homeowner Debbie Hollander is convinced. Her yard was a part of the Carolina chickadee study. A bird lover, Hollander was excited to see a nest in her

yard. Excitement turned to dismay when only one chick of four survived to fledge. The next year, she had no nests in her yard. “I always knew that native plants were important, but actually seeing these scientists walking around and counting caterpillars on the leaves really brought it home to me,” says Holander. “I would never, ever plant anything now that’s nonnative.” (Adam Cohen, *Ecologists Have this Simple Request to Homeowners—Plant Native*, 10)

To the world of bugs - and for the world in general - your actions could mean a world of difference.

For more information, call 903-675-6130, email hendersonCMGA@gmail.com, or visit txmg.org/hendersonmg.