

JOHN'S CORNER:

NEWS FROM THE WONDERFUL WORLD OF SOIL AND PLANTS

by John Ferguson

One of the keys to having a healthy garden is diversity. Diversity is essential to having stability in an eco-system. Diversity of microbes in the soil, diversity of nutrients (elements), diversity of plants, diversity of insects, and more. For example, 90% of our birds eat caterpillars when they have eggs and baby birds in the nest, as they need that concentrated nutrient rich source of food. Hence, do you plant a species from Asia that only feeds zero or maybe one type of insect? If so, you will not have the beautiful birds that control other pests. Today we have 1.5 Billion fewer birds than 40 years ago and 432 species of birds are on the edge of extinction.

When we plant an invasive species of plant or even one from a different part of the world it is a type of pollution called "Biological pollution". The USA has over 3,300 species of introduced plants from other parts of the world and most become invasive as we do not have the species of pests that keep them under control in their native habitat.

The imported fire ant is a common example of an imported species, with none of its natural controls. In some areas one can see a mound every 10-15 feet. A number of years ago I was invited to give a series of lectures in Costa Rica where the fire ant is native. However, there one would see a mound and the next one was hundreds of feet away and they were not a serious problem as there were many predators that kept the population in check

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Even the mulch we use is important. Most spiders do not spin webs as they are hunters that hide in a mulch layer during the day and come out at night to feed. One of their favorite foods is mosquitos. Spiders eat more of these pests than birds, bats and dragonflies combined. Does the mulch you use create a home for them or discourage them? A few examples of bad mulch are Cedar, dyed mulches, ashen mulches, etc. A coarse screened composted native mulch which is naturally a dark chocolate brown color if made properly is of very high quality. As a bonus it is also one of the most fire-resistant mulches available.

A black cherry tree (Prunus serotina) may have (support) 239 caterpillars of 14 different species of butterflies and moths. All the native Prunus species combined support 276 species of caterpillars! These are our butterflies and moths. A few that I am aware of are Banded Hairstreak, Spring Azure, Tiger Swallowtail, Painted Lady, Viceroy, Henrys Elfin, and the Red Spotted Admiral butterflies. Birds also love the fruit which is edible and makes great jelly or beverages. Compare this to the Gingko tree which supports zero species or compared to the family of trees we call Oaks support 481 species of caterpillars.

Our Eco system today is like a Persian rug that has been cut up into hundreds of pieces...it no longer looks like a Persian rug; hence our ecosystem is failing. In our subdivisions we need to think of how we can link a path to connect all these pieces in different yards (Dr. Doug Tallamay)



For example, the Lonicera sepervirens our native Coral Vine or Coral Honeysuckle is a host plant for 5 species of Sphinx moths. Hummingbirds love it and the berries are food for many species of wildlife. It is cold, heat, drought, flood tolerant with few insect or disease problems and is beautiful. We need to use this native instead of the invasive Japanese Honeysuckle that is destroying ecosystems.



Bring birds to your home today by growing native plants. With Audubon's Native Plant Database, you can find the best plants for the birds in your area. Growing bird-friendly plants will attract and protect the birds you love while making your space beautiful, easy to care for,



and better for the environment. Explore all of our native plant resources here." There is additional information on their websites:

https://www.audubon.org/ and www.audubon.org/plantsforbirds

The National Wildlife Federation has a lot of information on native plants and how-to bring wildlife back into one's garden and it can be found at:

https://www.nwf.org/Educational-Resources/Wildlife-Guide

They also have a guide to help you find native plants for your area that are not only beautiful but support wildlife. https://www.nwf.org/NativePlantFinder/

We have to rethink how we design our gardens to use more native plants in the landscape and become part of the solution instead of part of the problem.

To support a healthy ecosystem our landscapes must do the following:

- Support life (from microbes to insects, birds and small mammals)
- Sequester carbon (increase the organic matter in our soil)
- Clean and manage water (do not use toxic chemicals)
- Enrich the soil (use compost, native mulch and organic fertilizers)
- Support pollinators (Use native plants and reduce the amount of lawns)



In May this year the United Nations released a report on this issue: "The Report finds that around 1 million animal and plant species are now threatened with extinction, many within decades, more than ever before in human history." If we allow these extinctions to occur many ecosystems will collapse. Without these ecosystems many food webs of life will collapse with huge environmental consequences (no one is above the law of nature (God). This type of loss will provide a mechanism to make the Biblical prophecy of the end times come true.

Last month OHBA (Organic Horticultural Benefits Alliance) brought in Dr. Doug Tallamy whom gave a wonderfully seminar on this subject. If you missed it his book is excellent and should be on every gardener's reading list.

"Bringing Nature Home - How You Can Sustain Wildlife with Native Plants"

by Douglass W. Tallamy, Timber Press, 2014, Edith Printing,

ISBN-13: 978-0-88192-992-8

Many communities around Texas are now offering rebates to purchase native plants as it costs far less to encourage planting natives than spend billions of dollars on infrastructure to do the same thing. For those readers whom live in The Woodlands area, Nature's Way Resources is proud to provide native plants that qualify for the 50% rebate on their approved native plants list.



We are also partnering with The Woodlands Township to raise 15,000 milkweed plants of multiple species to provide host plants (food for our beloved Monarch butterfly caterpillars that will be given away this fall.

A rapidly growing trend around the country is getting rid of lawns and creating "Urban Meadows". These meadows are beautiful, take very little work, cost almost nothing to maintain and provide tremendous environmental benefits and are essential for healthy ecosystems from pollinators to birds.

Last month the state of Minnesota passed a bill to help folks convert their lawns to bee friendly landscapes (Urban Meadows). They reimburse homeowners 75-90% of the cost of removing and converting their lawns. As homeowners convert their lawns to meadows, they will save a lot of time in maintenance of lawns (mowing and edging) and they will save thousands of dollars of expense in fertilizer, chemicals and water bills each year. In addition to all the other benefits and best of all, they become part of the solution instead of part of the problem.