

Trickle-Down Ideas?

Most home gardeners love to experiment! Their small lots allow mistakes to be added to the compost pile without it being a budget-buster. Some of the things they may try on their vegetable plots could possibly be adapted from ideas that do work on a real farm. The use of cover crops is one such program and might it not be possible to set seeds or seedlings into a plot that has not been rototilled, just as no-till planting is done in larger spaces?

You may remember how surprised you were in high school physics class when you learned that the work 'inertia' meant not only the tendency for a resting body to stay put, but it also meant the resistance to change, that so-human habit to do what we have always done, just because we have always done it! Perhaps we have been overcome by inertia.

Reading about an Iowa no-till farmer reminded me of that inertia complex. Despite the decades of success he has achieved with his cover-crop/no-till methods when his crops flourished through droughts that devastated neighboring fields, his methods have not been widely adopted by his neighbors. They till because they have always tilled even though they understand the nature of soil structure and know that tilling disturbs soil microbiota and produces erosion. No-till, cover-crop farming enriches the soil, adds organic matter, prevents the escape of CO₂ into the atmosphere and reduces the need for synthetic fertilizers and pesticides. I expect it takes a little more time and a lot more management skills.

The U.S. cornbelt is one of the earth's most fertile areas: the soil is so rich in that one state, Iowa, that it is reputed to produce more grain than Canada and more soybeans than China. Since settlers first started farming in the 1800s, Iowa, for example, has lost one-half of its topsoil. According to soil scientists it takes between 700 and 1500 years to make one inch of topsoil so surely soil is not an easily replaced natural resource.

Perhaps there is a lesson here for home gardeners who use their small tillers with enthusiasm, leaving the garden neat and tidy and waiting for spring. A variety of cover crops are recommended for Virginia. Legumes such as alfalfa, crimson clover, fava beans (the small variety not the ones grown to shell), and hairy vetch fix nitrogen in the soil, lessening the need for adding more. Annual buckwheat, barley, rye, ryegrass and oats can be planted in late September to protect and improve the soil. Currently these crops are turned under to decompose but could they be mowed in early spring to prevent the formation of seeds and left to form a mulch for spring and summer crops plugged into holes?

Postscript on bugs:

Orders of insects are infinite for practical purposes with about 90,000 species of insect in just the United States and Canada. When speaking recently of good bugs and bad bugs, most gardeners will know I was speaking loosely, too loosely perhaps. Bugs are insects: not all insects are bugs. The only true bugs are the insects belonging to the order Hemiptera. They are distinguished by having sucking, beaklike mouthparts, sort of hidden away between the bug's chin and chest when not actually eating. The Hemiptera now includes cicadas, aphids, spittlebugs, scale insects and other small hoppers that were once classified in their own Homoptera order.

To further complicate matters, orders have suborders. For example in suborder Heteroptera are the original true bugs such as stinkbugs, squash bugs, waterbugs and assassin bugs. They look like beetles, but no, they are true bugs.

For Bay-Watchers:

Tomorrow, September 13, is the last day to send your two cents worth to the Virginia Department of Environmental Quality. Ask the DEQ to refrain from exempting industrial sites from the directives that farms and municipalities have been following to prevent pollution entering the Chesapeake Bay. These restrictions have done a good job in controlling foul runoff entering the Bay. The email address is: burton.tuxford@deq.virginia.gov.

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