Flowers and Leaves, Energy and Synergy
by Dennis Payton Knight

Our friend Joan Mish, a Windsor Writers compatriot, wrote an essay this week on the energy expressed in nature's colors, green for new growth, yellow for early blossoms, red for strength and expectation, purple for royalty and safety, blue for sadness and melancholy.

Joan is wise in that observation. All the colors in our prism of light find their canvas in the flora of mother nature and serve a purpose in sustaining life. It is an impressive coding of hues that attracts an equally marvelous array of pollinators living on the nectar of enticing flowers. And, in so doing, contributing to the reproduction, evolution and survival of both species. Each of those benefits is a byproduct of the other. It is a symbiosis that is at the very rudiment of life.

In nature, green is the primary color, a pigmentation called chlorophyll in the leaves of plants capturing light and converting it to a chemical energy that the plant uses to nurture itself and to bloom. This is a process called photosynthesis, which means to make things with light. Photosynthesis requires six carbon dioxide molecules and six water molecules to produce glucose, a sugar that feeds the plant.

As a result of photosynthesis, six molecules of oxygen are also produced. Surprisingly to you and to me, the oxygen produced by photosynthesis is not the intent of the process, but a byproduct, the waste the plant sends into the atmosphere after it fixes its dinner.

That may be an odd way of expressing it, but like pollination, photosynthesis too is symbiotic, producing the oxygen of all life on earth, from the earthworm to the soaring eagle. And guess what, for every six molecules of oxygen it produces, a green leaf filters six molecules of carbon dioxide out of the air. It is a stunning symbiosis of energy and synergy.

Energy is synergy. Synergy is energy. To be specific, synergy is a behavior of a biological system that cannot be predicted by the behavior of its parts, and energy is the impetus for it all. You do not get one without the other, and you don't get trees and flowers, bees and butterflies, either.

The synergy and energy of reds and yellows, blues, purples and especially greens. Is there any wonder that we love them?