

IN THE SOURLANDS

Heed The Weeds

by Jared Rosenbaum

Late summer can be a time of great abundance in the garden, with baskets of tomatoes, melons, peppers, and squash (and squash) to harvest every day.

It can also be abundant in quite another way, as legions of weeds thrive in the moist heat, laying waste to vegetable or flower beds so carefully planned in winter and crafted in spring. Ever come back from a summer vacation to find a garden patch unrecognizable in the riot of unwelcome growth?

Many consider weeds to be "plants out of place", but I differ. Weeds are precisely those plants that thrive in the types of disturbance that we humans are so adept at creating. Bulldozing, tilling, herbiciding, mowing... we're constantly whacking around with some kind of machine and compacting the earth with the footfalls of our prolific species.

Weeds are here because we are. They've evolved together with our shifting technologies, and they're often extraordinarily suited to the conditions we create.

Dandelion lies low beneath a mower's blades and then shoots up with the stored might of its deep taproot, flowering and producing seed in less than two weeks.

Palmer's amaranth has evolved resistance to glyphosate (i.e. RoundUp) herbicide, and now thrives in the fertilized ground of Midwestern corn fields.

Most plants -- wild, natural, indigenous ones -- are averse to the type of mechanical and chemical damage we do. We mourn those native plants extirpated by habitat degradation and destruction, yet we revile the weeds that thrive in the world we create, just as we do rats and cockroaches and other critters that accompany our settlements.

There's a bitter irony here -- we shape the world and then look with disgust upon the living things that persist in the habitats we create.

Deep in a natural forest, one sees few dandelions or amaranths. However, a different breed of weeds can be found in most central Jersey forests. These are *invasive species*, plants that seem to succeed in natural areas without the type of constant human disturbance that is a boon to the weeds we see in our gardens or in the cracks in the road.

Invasive species are plants from other ecological regions (often other continents) that have arrived in our natural areas through a variety of means and are now spreading like... weeds. While the human disturbances that engender dandelions may be pretty obvious, sometimes the anthropogenic (human-created) conditions that lead to invasive species taking over can be more obscure.

Human impacts can be proximate in space, or even removed in time. Sometimes a woodland that lacks native plant diversity but is dominated by a thorny weed -- (Japanese barberry, perhaps) -- was a pasture in the last century. Livestock may have grazed heavily, leaving no native plants and few seed sources once the pasture was abandoned. Sometimes a beautiful old forest in a ravine is full of invasive species because the farmland at the crest of the ravine is erosive and excess nutrients in the form of chemical fertilizers flow in copiously, shifting soil fertility to favor prolific, aggressive weeds.

Many times, deer that are harbored in suburban habitats, thriving on landscaping and sheltered from hunting, also browse natural forests and meadows, reducing native plant diversity and opening up niches for deer-resistant invaders.

Whether we are gardeners or the owners of wooded acres, we can all spend a lot of time removing weeds only to see more spring up in their stead. When the underlying conditions that promote weeds go unaddressed, areas from which weeds are removed will tend to become weedy once again. Said another way, if you only treat the symptoms, but not the underlying causes, you are unlikely to achieve healing.

Weeds can be maddening, but they tell a story. The message in that story is about the ways we manage land, often to the detriment of stable, diverse, perennial plant communities. Like a headache or a sore back, these messages can be heeded and the underlying conditions addressed.

Stewardship of the earth is a nascent and fresh idea, or perhaps an old one now returning to us. We all see how our practices can be detrimental to the Earth. It is harder, perhaps, to see how we can be healers, how we can support the glorious abundance around us. But heeding the weeds might be a great way to start.

Jared Rosenbaum is the Naturalist Advisor for the Sourland Conservancy's *Sourland Stewards* program. As a part of *Sourland Stewards*, the Conservancy will offer "Stewardshops" (stewardship workshops) at which participants will learn about good stewardship practices at residential sites in the area. For more information and to join this stewardship program for residents, visit www.sourland.org or send an email to lcleveland@sourland.org. *Sourland Stewards* is funded in part with grants given by the Conserve Wildlife Foundation of NJ, the Watershed Institute and New Jersey Conservation Foundation.

For more information about invasive plants, see the chapter in *Living In The Sourlands*, the Sourland Conservancy's guide for responsible environmental stewardship, available online at <http://sourland.org/wp-content/uploads/2013/09/LITS.pdf>