Wild Urban Plants©

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The basic goal of my recent book, *Wild Urban Plants of the Northeast: A Field Guide* (Cornell University Press, 2010), is to help the general reader identify plants growing spontaneously in the urban environment and to develop an appreciation of the role they play in making our cities more livable. The 222 plants featured in this book are those which fill the vacant spaces between our roads, our homes, and our businesses; take over our neglected landscapes; and line the shores of our streams, rivers, lakes, and oceans. Some of these plants are native to the region before it became a city, some have been brought there intentionally (or unintentionally) by people, and some have gotten here on their own, dispersed there by wind, water, or wild animals. They are the plants which grow and reproduce in the city without being planted or cared for by people. They are everywhere and yet they are invisible to most people.

Given that cities are totally human creations and the original vegetation that once grew there has long since been wiped out, one can make the argument that spontaneous plants have become the de facto native vegetation of the city. Indeed, a basic premise of this book is that the ecology of the city is defined not only by the cultivated plants that require on-going maintenance to survive and the native species which are restricted to protected natural areas, but also by the plants which dominate the neglected interstices of the urban environment. This wasteland flora — which no one plants and no one takes care of — occupies a significant percentage of the open space in many American cities, especially those with a faltering economy. Recent research has begun to show that this "emergent vegetation," if left undisturbed long enough to develop into woodlands, can provide cities with critically important social and ecological services at very little cost to the taxpayer.

There is no denying the fact that many — if not most — of the plants covered in this book suffer from image problems associated with being labeled as "weeds" or, more recently "invasive species." From the plant's perspective invasiveness is just another word for successful reproduction, which of course, is the ultimate goal of all organisms, including humans. From a utilitarian perspective, a weed is any plant that grows by itself in a place where people don't want it to grow. It's a value judgment that we apply to plants we don't like, not a biological characteristic. Calling a plant a weed gives us license to eradicate it. In a similar vein, calling a plant invasive allows us to blame it for ruining the environment and it's certainly easier to blame a plant for that than to blame ourselves. From the biological perspective, weeds are plants that are adapted to disturbance in all its myriad forms, from bulldozers to road salt to acid rain. Their pervasiveness in the urban environment is simply a reflection of the continual disturbance that characterizes this habitat. Weeds are the symptoms of environmental degradation not its cause, and as such they are poised to become increasingly abundant in our lifetimes.

Developing the list of plants covered in this book has been a lengthy, 5-year process. Part of the difficulty arose from trying to distinguish between the terms "urban vegetation," "invasive species," and "weed." Given that the meaning of these words varies depending upon who is using it, I have developed my own definitions

that are consistent with the goals of this book. I use the term "urban" to refer specifically to any part of a city or town where more of the land is covered with pavement and buildings than not, and most traces of original native habitats are long gone. The urban environment is also characterized by high levels of disturbance associated with pedestrian and vehicular traffic, infrastructure maintenance and new construction. In this book, plants which can survive and reproduce under such conditions — regardless of where they come from — are referred to as "spontaneous urban vegetation." From a plant's perspective, it is the abundance of paving and disturbance rather than the density of the human population that define the urban environment. In other words, a sidewalk crack is a sidewalk crack whether it's in a city or a suburb.

Most of the plants included in this book display — to a greater or lesser extent — an ability to colonize disturbed ground across a broad range of unmanaged, urban habitats. From the ecological perspective they can be considered, with relatively a few exceptions, disturbance-adapted, early successional species. In the absence of maintenance, the default vegetation of the cities of the Northeast is the cosmopolitan collection of plants described in this book. They are preadapted to the early successional conditions that we humans have created in the urban environment, and as such they can legitimately be considered its natural vegetation. Roughly speaking, 40% of them are native to North and Central America, 48% are from Europe and Central Asia, and 12% are from Eastern Asia.

It is a foregone conclusion that the world as we know it today will continue to deteriorate over the next few decades as people continue to pump more heat-trapping carbon dioxide into the atmosphere and more acid rain falls back to earth to pollute both the water and the soil. The worldwide migration of people from the countryside into cities is also contributing to environmental degradation because it replaces land which was once covered with vegetation that lowers surface temperatures with buildings that generate heat and pavement that retains it. The confluence of climate change and urbanization — acting in concert with the global spread of invasive species — has set the stage for spontaneous vegetation to play a major ecological role in the human-dominated landscapes of the future. Regardless of how we feel about this brave new ecology, the plants described in this book are well adapted to the world we humans have created and, as such, they are neither good nor bad — they are us.

LITERATURE CITED

Del Tredici, P. 2010. Wild urban plants of the Northeast: A field guide. Cornell University Press, Ithaca, New York.