



WHY COLORADOSCAPE WITH NATIVE PLANTS?

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The Front Range of Colorado is (or was) a short grass prairie ecosystem. That is what is supposed to be here, or at least what was here before European settlers came.*

Those plants that were here before Europeans arrived we refer to as native plants. The plants that were here co-evolved with the insects that were here, part of a tightly linked and highly interconnected ecosystem. To keep or restore that balanced ecosystem, we need these native plants to host native insects, which in turn feed birds or become important pollinators themselves. In a now famous series of studies, Doug Tallamy** has shown how much more important native plants are to the food web than introduced plants; essentially native plants, particularly some keystone genera or species, host as many as hundreds of times the native caterpillars as non-natives. These caterpillars feed birds and other wildlife or turn into important pollinators in their adult phase. Without these caterpillars that dominate the base of the food web, native birds and other wildlife populations can decline precipitously.

We are not going to recreate the Front Range's ecosystem in its entirety in our urban and suburban landscapes, but we can do A LOT better than we are doing now. The numbers we've seen are fairly dire – only 3% of the short grass prairie ecosystem still exists. And it is a very important ecosystem. Important for many reasons, not the least of which is carbon sequestration. Here are some daunting statistics:

- 50% of the city of Denver is paved or impervious surface
- Only 8% of Denver is dedicated parkland, and most of that is Kentucky Bluegrass (compare that to NYC, which we think of as a concrete jungle, but which is 21% dedicated parkland!)
- 55% of residential water in urban areas is used to water outdoor landscapes, and much of that is used to water Kentucky Bluegrass, which supports much less wildlife than a native landscape.
- The Colorado River, supporting 40 million people, is at its lowest point since the Colorado River compact, on the back of a 20-year drought that is the worst in 1200 years. It is expected to go much lower.

In the face of these figures, you might wonder, what possible difference could I make in my puny yard?? For starters, we can begin to make up some of the loss of short-grass prairie ecosystems and help with water shortages by “going native.” In addition to environmental benefits, native plants can make for happier gardeners, too. Here are just some of the reasons to convert your yard to native plantings:

- You are going to spend a lot less on water! Most native plants (although not all – select carefully!) require very little, if any, supplemental water to thrive. In addition to a lower water bill, the water you would have used can stay in our rivers, like the beleaguered Colorado.
- Native plants are adapted to our local soil conditions, so, for the most part, you do not have to amend your soil for them to grow well.
- The roots of many native plants go deep. Those deep roots build soil, and also sequester a lot of carbon. It turns out that intact prairie landscapes can store as much or even more carbon than forest landscapes, largely due to their extensive root systems. In contrast, Kentucky bluegrass roots go down a maximum of six inches, sequestering very little carbon, and requiring water and fertilizer in order to be of any carbon benefit.
- Native plants are able to withstand our harsh weather conditions – 80 degree drops in a day; hail in May just as things start to grow; really hot and dry conditions in the summer; and really cold and windy conditions in the winter. They were born for it!
- For small animals, a small change can be a big deal. Insects and birds don't require vast acreages of wilderness like bison, elk, or wolves. A suburban yard can be an oasis or connect habitat fragments for these smaller wildlife.
- And Colorado native plants offer many beautiful alternatives to the generic East Coast-centric 'big box' landscapes many of us have grown accustomed to, allowing us to move beyond generic landscaping in favor of 'Coloradoscaping' and create landscapes unique to our beautiful state.

And, there is always the question of how many native plants do I have to plant, to actually help the ecosystem. Well, here's the Wild Ones Front Range chapter's take on this:

The Wild Ones Front Range Chapter supports everyone who is committed to adding more native plants to their part of the Front Range, from a handful to a yard full. Each native plant that you add provides a landing place, food source, and/or a nesting site for local wildlife. You can place potted native plants on your balcony or simply replace non-thriving plants in your landscape with natives over time. Of course, the more native plants there are, the bigger the impact! If your goal is to create a sustainable biodiverse habitat, we suggest incorporating at least 70% native species into your garden.

So, what's stopping you? Our toolkit is designed to support you as you move toward Coloradoscaping with native plants (see Wild Ones Front Range definition below), with practical step-by-step information and tips on planning, designing, planting and maintaining native plants in your landscape. Please check out our video on *Why Natives*, coming soon.

* There is a book, *1491*, by Charles C. Mann, a study of the western hemisphere before 1492, which posits that there is evidence that the Front Range was forested, and that Native Americans manipulated the landscape quite a bit, to where it became short grass prairie.

** Douglas Tallamy is an entomologist, ecologist, and writer who advocates for home gardens and landscaping to provide habitat for native plants. He has done extensive research on the connections between plants and insects. Specifically, he has examined the native versus non-native plants as caterpillar hosts and chickadee habitat, and has found a vast difference between them. His famous example is: For chickadees to fledge a nest, they need as many as 9000 caterpillars. A native species of oak tree (in the Eastern U.S.) hosts 557 species of moths and caterpillars! Tallamy's group found that study areas with introduced plants had 68% fewer caterpillar species, 91% fewer total caterpillars, and 96% less caterpillar biomass than areas with native plants. It should be noted, however, that Tallamy's research has been done in the Eastern U.S. There are regional differences.