

## Why Native Plants revised

Native plants have been a hot topic in recent years. It seems such an obvious fit for gardeners who want the human footprint to be as small as possible. But some of the reasoning behind their uses seems to differ from reality.

'Pest free', 'disease free', 'drought tolerant', 'adapted to our climate', 'encourage birds and butterflies', 'once established they require less care'. These are the statements you will find in the native plant catalogs. All of these are reasons to excite any gardener to plant natives. But are they true? Will non-native plants give you the same benefits? Let's try to understand the reasons for using native plants over non-native plants in our landscapes.

Pest Free: When you consider 96% of a birds diet comes from eating insects, especially in the spring when feeding their fledglings, is it a good idea to bring in pest free plants? How is it you can have birds in your garden if you have no insects for them to eat?

Disease Free: Weak, unhealthy plants bring about Diseases, regardless whether it is native or non-native.

Drought Tolerance: Plants have evolved for millions of years. Some like it dry while others like it moist, some like gravelly soils, some grow in clay soils, and others don't care one way or the other. These habits have nothing to do with being a native or non-native.

Adapted to our climate: Plants will adapt very well if they like where they are growing, regardless if native or non-native.

Encourage Birds and Butteries to your garden: As mentioned earlier I don't know how you can have a pest free plant and encourage the birds into the garden when so much of their diet is insects & caterpillars.

Once established they require less care: If a plant adapts well to our climate, native or not, once established it will require little care. In fact, part of the problem with non-natives is they can out-compete with native plants and become invasive, requiring no care.

So why should we plant natives? Think of each different ecosystem as a circle. In the circle are all the parts: sun, plants, the animals that eat the plants, and the smaller creatures that clean up the mess. The only way the ecosystem works is if the circle stays intact. Plants absorb the sun's energy. With the energy and nutrients from the soil the plants grow, flower, producing seeds and fruit. The plant doesn't go through this metamorphosis for our enjoyment. It is delivering a food source for insects, grubs, slugs, caterpillar, to name a few. These are the herbivores in the cycle. As much as we consider them as pest in our garden they are the food for birds, frogs, snakes and many carnivorous insects that love to feed on the leaf-eating insects in the garden. Along the way the waste is recycled by a multitude of very small creatures; soil microbes, worms, and grubs, bacteria & fungus. Their waste creates nutrients in the soil to help feed the new plants. Death is celebrated as much as life for without it the circle will not continue.

Plants (flora) and animals (fauna) have worked out a balance. Plants evolve to fend off insects; insects evolve to feed on plants. Many insects are very selective of the plants they will eat, and only live in an ecosystem where the plant grows. Other insects are not fussy and will be found in many different ecosystems. The planet has evolved over the millennium where flora and fauna coexist and find a balance. This makes each ecosystem unique. When non-native plants are introduced into a new ecosystem they are not recognized as food by the native fauna. The insects don't see the leaves as food, the native birds don't recognize the fruit in the autumn & winter when food is so scarce. If we introduce a new plant to our ecosystem without the benefit of countless years of evolution, then the new plant has no predators. Life's cycle has been broken.

To me, this is the most important consideration when introducing a non-native plant into our ecosystem. It has taken many years for nature to find the balance. How will the non-native plant interact with that balance? Can it become part of the circle, or does it operate outside of the circle? There are many examples of non-native plants being introduced into our ecosystem. Many of the plants currently available at our local nurseries are non-natives. If you are an advocate for using only native plants in the landscape than even native hybrids are considered non-native. There are examples of some of these non-natives pushing out the local flora because they have no natural predators. Once a non-native has been introduced and becomes established, it is almost impossible to eradicate. Are we willing to stop introducing new and interesting plants with their wonderful flowers, smells and foliage? Plants that may have come from Asia or Europe, or from our own country but in a very different ecosystem. Or do we just live with our native plants and all their beauty, keeping the cycle in tact?

I think there is a way to have both natives and non-natives. What is most important is that you have an understanding how it all works and understanding the cycle. When thinking about your next plant purchase, think of the circle. Come to an understanding of how it works and how your plant purchase can impact our ecosystem. Let that help guide you in planning and planting your garden.

I put on a workshop not long ago and one of my first questions to the group was “What is a native plant”, no one raised their hand. Maybe if you knew what was available in the way of native plants you will see that there are many that can give you the color, texture and fruit that is so important to our modern garden. I am not asking that you reinvent your garden. Maybe understanding the importance of using natives will guide you in a direction as your garden evolves.

I think the trend towards using native plants will be with us a long time and knowing what is a native to Northern Michigan will be very helpful. Nurseries staff need to educate themselves about natives and the customer needs to have an interest in purchasing natives. When this happens we become part of life’s cycle.