

## Headline: A Short Lesson In Permaculture

As the old saying goes, appearances can be deceiving. One look at the fields of Laura Jean and Vaughn Wilde and you might assume they'd been allowed to grow out of control or run wild. Nothing could be further from the truth. Instead, in its maze-like layout, there's a place for everything – and most of the hundreds of different plants serve multiple purposes. That's just one facet of “permaculture,” a concept that's almost as philosophical as it is physical.

Although the Wildes have been practicing it since they bought their Lambton County farm back in 2005, it took a few years before they even realized there was a name for what they'd been trying to do. Laura Jean says, “It's kind of funny when we first discovered permaculture was what we were doing. We'd been doing it for about five years.”

The concept itself has many characteristics. As Laura Jean explains, “It's hard to describe really quick. The word itself is based on permanent culture. So, instead of working the soil, planting some seeds, harvesting the crop – and next year doing the same thing – it's permanent.

“Everything is either a perennial or it reseeds itself. The whole idea behind the concept of permaculture is that, if you design it properly and put the work into it initially, once it's established and starts growing on its own, then all you do is harvest. It's literally a walking-through, edible forest.”

The main part of the farm starts with a 2.5-acre test plot that's well-planted, but far from finished. Over the past few years, the Wildes have introduced more than 2,000 plants and trees to the field. Following the philosophy of permaculture, what they're doing is jumpstarting the natural system, trying to recreate what the land was like a thousand years ago.

That all starts with weeds, the basis of the entire system. The weeds – things like dandelions and sow thistles – will provide the soil with what it needs most, including deep taproots, nitrogen and minerals. In turn, these will help to build up the succeeding layers: grasses, bigger wildflowers (like asters and goldenrod), pioneer plants (pines, maples) and shrubs (apples, pears, berries) and, eventually, hardwoods like oak and tulip. Each layer will form a new canopy, supporting and complementing the previous and next layers.

Laura Jean says, “What we're trying to establish with permaculture is to get right smack-dab in the middle of that transition.”

Along their journey, the couple has discovered numerous new concepts that they've incorporated into the overall make-up of the farm.

One of these is “Hugelkultur”. The idea of a “Hugel bed” is to create a raised garden bed using wood as a base. “Wood, by its nature, soaks up moisture. Where it contacts the ground, it's damp,” says Laura Jean. “The idea is that when you have soil next to that damp wood, it's actually able to absorb some of that moisture.” Starting with wood, you can add compost, kitchen scraps and more compostable material, creating a perfect growing environment for vegetables and more.

That leads to another concept, which involves perennial vegetables. If that sounds contradictory, it isn't. As Laura Jean explains, “The annual vegetables that most people grow in their gardens were actually perennial vegetables once. And they were selected and selected and selected for improved taste and texture and so on and other characteristics – and they lost their hardiness.”

Although the concept is still new to them, what the Wildes hope to do is start hybridizing annual and perennial versions of some of these vegetables to bring them back to

their original states. This includes things like kale, carrots, onions, garlic, tomatoes, and ground cherries.

Another idea that's big in permaculture is that of the "guild." This is a pre-designed group of plants that complement each other. The most popular are apple tree and walnut tree guilds. A starter mix for a walnut tree guild might include hackberries, currants and gooseberries. Hackberries and walnuts produce chemicals that complement each other and, in turn, currants and gooseberries thrive in the environment that's produced by the other two plants. This is where the idea of everything working together really starts to make sense.

On the other hand, a "nectary guild" has a different sort of role. The Wildes', which is located in the middle of the field, helps keep all the natural insect predators happy and well-fed. Therefore, it contains a much larger variety of species, including yarrow, lavender, cedar, juniper, hemlock, tulip tree, white pine, birch, sycamore, spruce, plums, persimmons, and more. Not only is it functional, it also serves as a natural garden – and makes a nice place to hang out, too.

Working in conjunction with all the natural defenses against unwanted predators, the Wildes also employ "volunteer" plants, which help keep natural flora and fauna at hand. As Laura Jean explains: "Our concept of pest management is not to eliminate all pests, but to keep a healthy balance. And, in order to do that, we have to have what we call shelter belts around the property, which are areas we don't do anything with. We just leave them to their own devices."

Sometimes, however, the natural defenses just aren't enough. Although they try not to spray at all, when they do it's with a combination of pine oil, tea tree oil, neem oil and lemon oil. These serve as a natural way to deter fungus or insects that can't be controlled by regular means.

Although it's not part of the regular plot, the couple has added one other unique feature to their property, a "medicine wheel," which also serves to honour their aboriginal ancestry. Laid out in the shape of a turtle, there is a centre part with four corners. Laura Jean says, "Each corner represents one of the four directions and each direction has a colour." Within each colour, they've incorporated plants that mirror the intended colours. For instance, north is white, as in the "great white north" and features plants like white pine. Similarly, south is red, east is yellow and west is black. There are also paths cut into the shape that makes the entire garden look, from overhead, like not only a turtle, but also a map of North America.

Ultimately, the Wildes hope to turn their permaculture world into a profitable endeavour. One of the crops they're working on is organic nuts, as there's a big demand and no one else is growing them in Ontario. "We have more markets than we can fill. And I don't expect that's going to change," says Laura Jean.

Further down the road, they have even bigger plans. "We're looking at eco-tourism as a significant part of our market. These will be people that come down for the day. We hope to actually have a few cabins, where people can come down and stay overnight and pick and harvest." They hope to use what they've created as an education facility, as well as a crop-producing one.

Just like the circle of life, everything in permaculture also appears to have its own circle. All the crops, the animals, the layout – every single thing on the farm serves multi-purposes, which not only complement each other, but also help each other, too.

It's an ever-changing, ever-evolving world that incorporates a lot of trial and error. Certainly, there are mistakes along the way, but the couple learns and builds on those mistakes, discovering new and better ways of doing things, allowing their permaculture to grow and thrive. Laura Jean's husband, Vaughn, a man of few words (remember him from

the start of this story?) sums it up best: "It's all an experiment." And a fascinating experiment at that.