

I want to take a few minutes to talk about the Collingswood Community Habitat Project, and why folks in our town are working together to support beneficial wildlife, conserve natural resources, and enhance our town's natural beauty.

To start off – wildlife. At this point we probably all know the reasons different types of wildlife are in decline. When you read articles about it you'll almost always see the phrase "habitat loss" or a variant. Well here we are in very built up parts of the mid-Atlantic, and we're not about to create moose habitat or anything crazy like that. But there are ways that we can coexist with wildlife and promote healthy ecosystems, even in largely urbanized areas. And there are lots of great reasons our communities should be getting behind this.

Think back to a second to science class back in elementary school. Do you remember learning about food chains or food webs? Often they're depicted as a pyramid with different types of plant life or even microorganisms at the bottom, moving up to insects, then birds and mammals, and up to keystone predators. The problem in our urban and suburban spaces is that we've completely eliminated the bottom of the pyramid, even though we still have lots of room in between all of our buildings and roads for it. And without the bottom, you can't have a functioning ecosystem

And ecosystems are complicated things – you don't just need plants, you need the right plants, and that's where Habitat Gardening programs come in.

Imagine a typical suburban property. You've got the house and the driveway, then you've probably got a decent sized turf lawn (we have over 40 million acres of lawn in the US – it's our largest cultivated crop). Around the foundation are some nice neat shrubs purchased from the big box home store's garden section, with mulch all in between, and maybe even some flowers planted in front. That's a fair amount of plant material, but unfortunately it's almost completely sterile (and I'm not just talking aesthetically, though we'll get there).

In order to have a functioning ecosystem, even in a developed area, you need a diverse variety of native plants. Natives evolved as part of the local ecosystem alongside our wildlife, and they could be found here prior to European settlement. The problem is, over the last couple of hundred years, all kinds of exotic plants have arrived from all over the world, and for lots of complicated historical reasons, the horticulture and landscape industries in America have embraced those exotics at the expense of natives. Go into any big box store, examine the work of most conventional landscapers, and that's what you'll see. And the problem is that in most cases, that biomass is completely cut off from the local food chain. You probably know the basics about monarch butterflies at this point, right? Go on to explain. But that's just scratching the surface.

You may have been exposed to lots of campaigns about how we need to plant flowers to benefit pollinators because of how important they are for the food chain and even food production. And that's all true. But it takes more than nectar, so having lots of exotic flowering plants alone won't cut it. The larval forms of all of those insects, the babies, will nearly always eat other types of plant material, usually the leaves. And they need natives – they won't touch a lot of exotics, and that includes turf. And I'm not talking about defoliation. Or consider trees. Etymologists have identified over 500 insect species that use our native oaks as host plants to raise their young. But most exotics like ginkgoes or callery pear for instance can literally only host one or two species. If you have a big oak, it's covered in insect biomass – you just can't tell, it's up in the canopy. But maybe you don't give a damn about insects for their own sake, other than cool looking butterflies.

And that's fine, I can't blame you for that. But what about birds? Just about every songbird in our area has a diet very heavy in insect protein. Sure, birdseed is fine, but that's only supplemental. A chickadee weighs about a third of an ounce, and their young will only eat insect protein in the form of caterpillars, or larva. Does anyone know how many caterpillars it takes to raise just one brood of chickadees? 9000. Where are they going to find all of that biomass in an area with only exotic plants?

Ok, so that's the very quick case for the wildlife value, and in an ideal world, that would be enough reason for all of us to go out and replace half of our lawn with a wildlife friendly native garden. But realistically, I think we know that's not enough to change everyone's behavior.

But wait, there's more!

Alongside that horticulture industry that thoroughly embraced exotics, a chemical industry grew up to fill up the shelves of every box store and garden center with herbicides, pesticides, and synthetic fertilizers that you absolutely must buy to have the perfect American yard. Obviously many of them come at a cost to human health, water quality due to runoff, and loss of wildlife. And that's not to mention all of the supplemental watering exotic plants and lawn need to be at their greenest.

Well here's another great things about natives. Because they evolved to thrive in local conditions and with local rainfall, you don't need any of that nonsense to grow healthy natives, aside from initial watering to establish new plantings. Of course, that's as long as you have the right plant in the right place - wet woodland native won't do well in your sunny dry front yard.

So from a sustainability standpoint, and by that I mean specifically eliminating the need for harmful chemicals as a landscape input and overtaking our water supply, and protecting our waterways, gardening with mostly natives are the right choice there and something all of our communities should be promoting.

How many of you have read alarming articles about the coming (or current) Insect Apocalypse?

And here's the really good news. Eastern North America has an incredibly rich flora with amazing design potential. Europeans actually realized this first, and they were cultivating American species for their gardens long before us in many cases.

Lady Byrd Johnson was one of the people to really jumpstart the native plant movement, and one thing she said was that she wanted Texas to look like Texas and Vermont to look like Vermont. I think it benefits us to embrace the local flora, rather than have every American town look like the same weird pan-global horticultural nowhere.

And that relates to the last benefit I'll discuss, and this is a very human-centered one. There's a whole frontier of research that has opened up recently examining the benefits of exposure to and encounters with nature for humans, especially relating to mental health and childhood development. And the key to it all is, this exposure doesn't have to happen in National Parks or pristine wilderness, it can happen in small pockets of nature, even gardens. And while most of the studies haven't gotten this granular yet, I believe that sterile landscapes with plastic-looking evergreens set in mulch beds with maybe some annuals sprinkled in next to a green lawn don't

accomplish this. But I believe that a naturalistic garden that actually changes with the seasons, is densely planted, and is buzzing with butterflies, songbirds, and other wildlife can. So it's incumbent upon all communities to make room for these little pockets of nature within our built environment.

Ok, so hopefully I've made my case, but how do we do it?

Here in Collingswood, we use the National Wildlife Foundation's Garden for Wildlife program as a means to achieve all of these benefits. In addition to doing a lot of public outreach and education campaigns and offering some really helpful web-based tools and resources, the NWF offers a landscape certification program. Any homeowner can go onto their website and see a checklist of different actions they can do in their landscape. Having native plants is key, but you also have to make sure you're including food sources, water (a birdbath works), cover for wildlife to raise their young or seek shelter, and that you're avoiding harmful pesticides and minimizing water use on your property. There's no limit to how small a property can be to become certified if they can check all of the boxes, so it applies even in heavily urbanized areas – people have even certified balconies in apartment complexes. The nice thing is that you can get a sign when you're certified which communicates that commitment to your neighbors and hopefully encourages them to do similar things.

You can also certify public spaces, schools, churches, and businesses. And what's more, if you certify enough properties in your community – the formula is based on population – you can become a Certified Wildlife Community. This is obviously a familiar model to Sustainable Jersey certification levels, but it's a nice feather in the cap of a town, and hopefully it spreads more awareness and encourages even more people to participate in these actions and practices.

So that's our goal for Collingswood – to get more people to buy into all of this, and use the goal of certification as motivation. We're a volunteer group that's connected to the Green Team, and we present at green fairs, we built a website with information specific to Collingswood, and we have a social media presence as well. We've also now installed two public native gardens as demonstrations to the town's commitment. The borough sprung for the plants, and volunteers did all of the work. We're hoping to add a space or two every year.

We're about halfway to getting the town certified, which will be nice, but that's not really why we're doing it (and we certainly won't stop our efforts there). As far as I know, there aren't any Sustainable Jersey points for being certified, but I believe we listed the Community Habitat Program as a special initiative or special project which got us some.

There are a ton of great resources available, and you can really go down a rabbit hole learning about native plants and sustainable gardening and the benefits of nature. I'll point you to a few in particular that are easy to remember and google. Of course there's the NWF Garden for Wildlife Program, which has a ton of great info and resources. Then there's Doug Tallamy's book *Bringing Nature Home*, which has served as a lot of people's gateways into this world. Finally, there's a great local website, *Jersey Friendly Yards*, which has a great tool for identifying plants, mostly natives but some exotics that fit in with sustainable gardening goals. And there's always the *Collingswood Community Habitat Program Website*.