

Ecological Garden Maintenance

From Indiana Native Plant Society Website, www.indiananativeplants.org

Prepared by the INPS Landscaping with Natives Team, April 2022

Most people create gardens for their own enjoyment, to enhance their properties and provide good outdoor experiences for their families and guests. That's a worthy goal, but we need to cultivate a broader way of looking at our landscapes: We have disturbed the land and its wildlife inhabitants to build our homes and gardens, and we can begin to heal the land by gardening in a way that restores habitat for the benefit of all life in the surrounding ecosystem. That means not just adding native plants to the landscape, but also maintaining the landscape in a way that respects the complex relationships between native plants and the insect associates that are foundational to the web of life. It means rethinking our seasonal garden chores to make sure we support the life-sustaining natural processes occurring on our land.

Mulching

Mulching a garden with organic matter is valuable because it conserves moisture, keeps weed seeds in the dark, and makes the garden look neat and tidy. But the benefits of mulch do not appreciate with ever deeper layers. People tend to overdo it, such as top-dressing existing mulch every year. Our Marion County Soil and Water Conservation District suggests we apply no more than 2 inches of mulch every 2 years. Volcano-style mulch applications at the base of trees only serve to rot the bark, so be sure you pull the mulch back several inches from the trunk.

Chopped leaves are the very best mulch because they break down to add nutrients to the soil and improve its tilth. If you chop your own instead of bagging and dragging them to the curb, you'll never have to buy mulch again.

Be sure to leave some patches of dirt uncovered with mulch so that our native bees can find places to burrow nests in the ground.

Weeding

Job one in the landscape is always to remove invasive plants. Tackle them first so they don't overwhelm your native plants.

Get to know your weeds! If a particular plant is not welcome in your garden, identify it (there's an app for that) and learn its habits. Call it by name as you yank it out.

Teach your children so they can help you pull known weeds.

Timing is important. Get to the weeds before they set seed, or they'll cleverly cover your garden with replicants for years to come. And dispose of them in the trash, not the compost heap.

If at all possible, weed your garden by hand. Some people spot-spray with an herbicide, but that can damage nearby desired plants and encourages weeds to develop tolerance to the lethal chemicals.

If a major weed infestation calls for herbicide, be sure to follow the manufacturer's instructions. Be aware that an herbicide application can drift into garden beds where you don't want it, so avoid spraying on a windy day. Also consider the time of year that you apply herbicide to remove invasive plants, especially groundcovers. These may be better treated in the fall, so as not to take the chance of killing ephemeral native plants in the spring.

Pruning

Follow the advice "right plant, right place" so you're not constantly fighting to curb the growth of a tree or shrub that wants to grow really big! Read plant labels to determine the plant's ultimate height and width and place accordingly.

Some people want to turn every tree into a lollipop and every shrub into a green meatball. Don't be one of them. The fashion today is to respect the plant's natural habit, whether mounded, vase-shaped, pyramidal, or whatever.

Prune mainly for the health of the plant, removing dead limbs, branches that rub against each other, or branches growing inward that obscure light to the interior.

If pruning to improve the appearance of the plant, a light touch with the pruners is best, keeping in mind that every cut you make runs a risk of introducing pathogens.

Time the cuts so that you're not removing next year's flower buds.

To rejuvenate an overgrown, scraggly looking shrub, cut out one-third of the oldest limbs at ground level each year for three years. This will encourage new shoots and a bushier appearance.

Insect Pests

Gone are the days for grabbing a can of Raid when you see a bug on a plant. Ecological pest management calls for a more lenient approach to our insect friends. One person's insect pest is another's foundation for the web of life!

Here's what to keep in mind. Not every insect infestation lasts forever. Nor does it come back every year. Your stand of New England asters may be decimated by caterpillars this year but bloom mightily next year as if nothing happened. One plant may suffer insect predation temporarily, but those around it may flourish because of having more space to themselves.

With enough biodiversity in the plant selection, Nature tends to balance the ledger, increasing the natural predatory insects to curb the infestation and drawing our feathered friends to snap up the high-quality protein for their nestlings. Experts say a variety of at least 10 different native species will do the trick.

Garden Cleanup

This is where landscape neatniks will need to moderate their views. Much as it feels good to cut every perennial down to the ground in the fall and rake all the leaves off garden beds, that's not good for the backyard ecosystem. Our insect friends need us to consider their needs.

Experts recommended leaving plants intact over the winter to provide food, shelter, and nesting sites. Try to delay spring cleanup until mid-May, or at least until the daytime temperatures are consistently above 50 degrees F° on seven consecutive days, by which time insect pollinators will have emerged. If this not feasible, at least leave some stems 15 inches long for the egg-layers and keep the debris on your property over the winter. Pollinator guru Heather Holm (*Pollinators of Native Plants*, 2014) advises cutting stems at varying heights (6, 12, and 24 inches) to make way for late-emerging bees. Stems left standing should not be removed in spring and will disintegrate naturally.

When it's time to cut down the dead vegetation, managers of Chicago's Lurie Gardens have a great suggestion. Cut back perennials to the ground in 6-inch increments and leave the debris where it falls. This provides all the natural mulch the emerging plants need.

Lighting

It may come as a surprise that landscape lighting has anything to do with ecological gardening, but artificial lighting is a real threat to our insect friends, migrating birds, and bats.

Security lights and porch lights that remain on through the night disorient insects, keeping them from mating and successfully reproducing. That means less food for birds to feed their young. Bright lights may even suppress plant blooming.

We urge you to install motion sensors on security lighting so the lights come on only when someone or something is actually prowling. And use yellow tinted bulbs for your porch lights, which are less attractive to night-flying insects.

Mowing

Neighborhoods love their lawns, and lawns have their place in a designed natural landscape, serving as a visual contrast to beds overflowing with native plants. But even lawn care can be done respecting your yard's ecosystem.

Reduce mowed areas or establish no-mow zones to save yourself some work and leave more habitat for our insect friends.

Mow less frequently and follow ecologically sensitive mowing schedules. For example, delay initial mowing in the spring to avoid killing caterpillars and other overwintering creatures that are just emerging or have yet to emerge (adopt "no-mow May"!).

Give wildlife a chance to escape the mower. A mowing pattern that starts in the middle and moves outward enables wildlife to flee. Start the mower or other power tools for a few minutes before you mow to give warning to wild creatures, and avoid mowing in the evening when more of them are out and about.

When mowing is required, set the mower height as high as possible, to at least 3 inches (and preferably 4 inches). Besides sheltering wildlife, this will keep sun-stimulated weed seeds in the dark.

Leaves

Rather than inflict noise and carbon emissions from leaf blowers on the neighborhood, ecological gardeners appreciate that fallen leaves act as an excellent mulch and provide overwintering habitat for many insects. They gather leaf litter for their garden beds and leave it lie.

Leaving the leaves is especially important around the base of trees. As Doug Tallamy (*Nature's Best Hope*, 2020) points out, most caterpillars do not pupate on their host plants but drop to the ground to find pupation sites in leaf litter or under the soil. A layered underplanting of shrubs and groundcover keeps falling leaves in place under trees and improves soil compaction, favoring the caterpillar life cycle. Fallen logs should also be left under trees where this can be safely done.

What about chopped leaves? These can be excellent mulch for delicate perennials or seedlings in garden beds, but leaves left intact at the base of trees, shrubs, and mature native perennials provide the very best habitat.

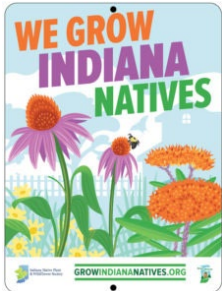
Neatness vs. Habitat

In a typical urban or suburban neighborhood, your neighbors will want you to maintain your property to a certain standard so as not to reduce property values. Can you create a garden that is both environmentally responsible and enjoyable to look at? If your aim is to create excellent wildlife habitat, you'll need to pay close attention to keeping the landscape neat and attractive. Here are some tips to help you successfully meld these two objectives.

Clear edges. Respect the neighborhood's devotion to lawns by including some turf areas but establishing crisp edges around garden beds for that cared-for look.

Artful design. Because natural gardens are ever changing, from season to season and even from year to year, they can make some people uncomfortable compared to standard landscaping that is largely static. Thus, principles of good design especially apply when gardening ecologically. Use human-made objects such as a bird baths,

fencing, or a bench to relate the naturalistic garden to human use. Plant natives in large groupings to bring swaths of color as they bloom (and help pollinators find them easily).



Signage. Help the neighbors understand what you're doing by including educational signage. If they come to understand your aims, they may be more tolerant of the way your garden deviates from the neighborhood norm and may even come to enjoy the colors changing with the seasons and watching the wildlife that comes to your property.

Hiring It Out

If you need help to maintain your garden, you'll need to hire someone savvy enough to recognize known weeds and leave other unfamiliar plants alone. Most landscapers cannot identify and do not recognize native plants. They will need your guidance to come up to speed. Again, planting in large groups of one species will help them recognize your intentional plantings.

You'll need to provide firm guidance also on mulching and fall cleanup. Conventional landscaping calls for rigorous fall neatening of beds, which works at cross purposes to your goal of enhancing the environment for wildlife.

If hiring out the application of pesticides (only if you must) and herbicides, be sure the person is licensed. The licensing process ensures they know at what time of year spraying will be effective and know not to spray in hot or windy weather, lest the chemical aerosolize or drift. To protect desirable plants, you can ask them not to spray closer than three feet from garden beds.