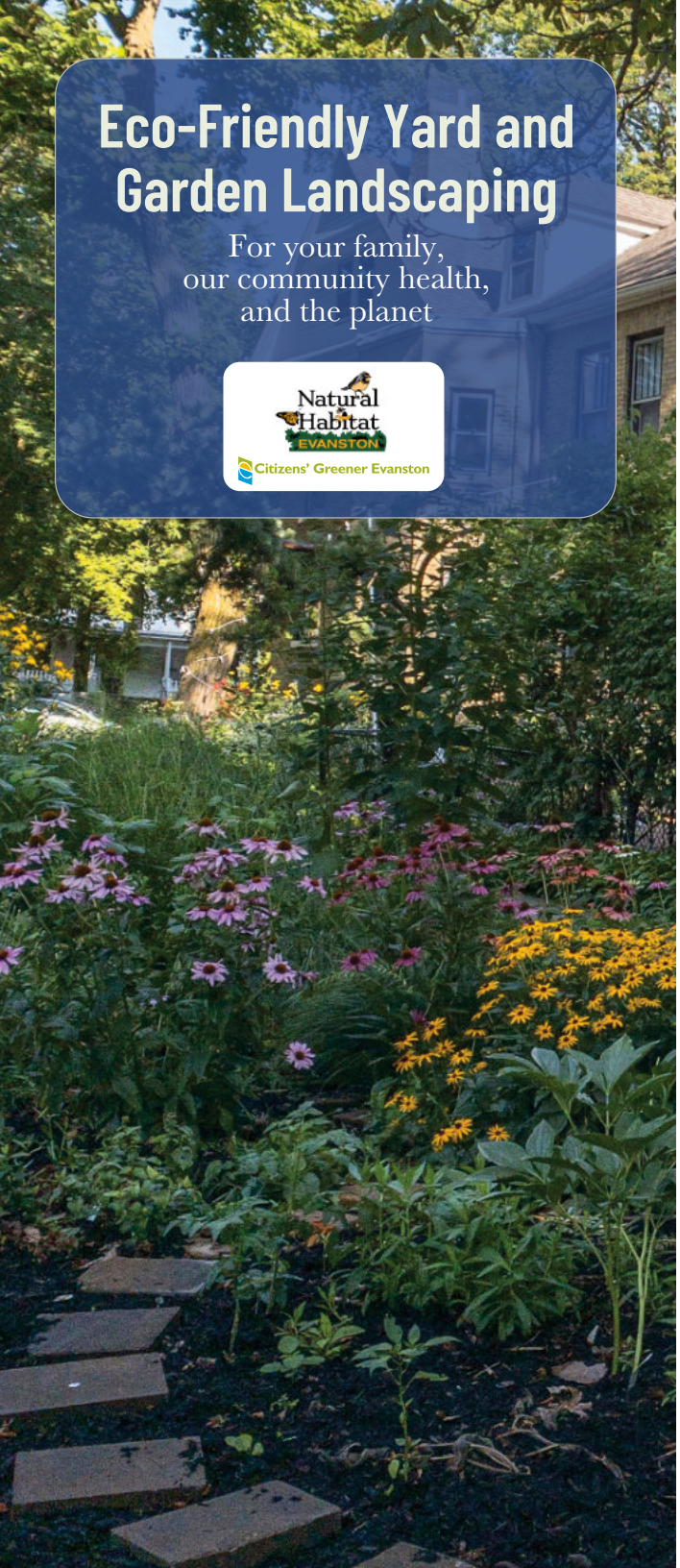

Eco-Friendly Yard and Garden Landscaping

For your family,
our community health,
and the planet

Natural Habitat EVANSTON
Citizens' Greener Evanston

Songbirds and pollinators are in steep population declines. Conventional landscaping practices add to the problem. As stewards of our gardens, we can help life flourish. Eco-friendly gardens may look different from the suburban standard, but they will be buzzing with life — attracting butterflies, bees, fireflies and birds — that enriches our daily lives.

Here's how to go about attracting life to your garden.

1

Choose native plants

Favor straight natives, not cultivars, and include host and nectar plants that provide year-round forage.

Birds need to be able to eat from your garden year round – finding seeds, nectar, berries and nuts, but also bugs. Baby birds in particular rely on insects, especially caterpillars. If you want birds, it is important to plant for insects.

Host plants are trees, shrubs, wildflowers or grasses that have a special relationship with a coevolved insect: the insect depends on a particular native host plant to grow and develop into an adult, and may even have developed an enzyme to digest an otherwise toxic host plant. About 90% of insects depend on a native host plant to grow and develop into adults. Just as monarch caterpillars need milkweed, the same relationship applies to most other insects, e.g., the violet fritillary needs violets, and the spicebush swallowtail needs spicebush.

Cultivars or "Nativars" are bred for features humans want, such as shorter than the native plant, different color blooms, variegated foliage.
The human-modified version may not provide the same benefit to co-evolved insects as the native plant. Breeding can alter the plant structure or chemistry, for example, making its leaves toxic, changing its leafing out time to no longer coincide with the lifestage of its co-evolved insect, reconfiguring its bloom shape or petals so that they no longer fit the pollinator, or making its blooms sterile. It requires research on each cultivar to determine to what extent it benefits native insects.

Insects are much less picky about nectar plants, which are essential to feed adult insects and birds like hummingbirds. Groupings of the same plant attract more pollinators. Nuts and berries that persist into winter provide high-calorie forage at the time when birds most need it.

2

Remove, and don't plant invasive exotic plants

Plant native selections densely to reduce weeds and attract beneficial insects.
To remove invasives, hand-pull or smother them with cardboard.

Invasive non-native plants crowd out and overrun native habitat. In our region, European and Asian buckthorn have taken over natural landscapes, sickening birds with poorly digestible berries. Other common invasives are garlic mustard, motherwort, winged burning bush, creeping Charlie, Japanese barberry and oriental bittersweet.

3

Avoid toxic chemicals

Don't use them on your lawn and garden, especially as they are typically applied at up to ten times the rates used on farm crops. They aren't good for us, and are especially bad for our kids and pets that have smaller bodies and more contact with lawns than we do. Lawn chemicals kill unintended targets: herbicides kill soil organisms, fertilizer runoff causes suffocating algal blooms in waterways, and mosquito sprays kill moths and bird nestlings. Eliminating chemicals also avoids their expense and the fossil fuels to make and transport them.

More on the back >

Cover photo: Jane Fulton Alt

Avoid seeds or plants treated with neonicotinoids, or "neonics," by shopping at native nurseries or native plant sales. Seeds and plants (non-natives and cultivars) sold in nurseries often have been treated with neonics, the most widely used insecticides in the U.S. According to the American Bird Conservancy, neonics don't just kill insects: "…a single seed treated with neonics is enough to kill a songbird." Because neonics are systemic poisons, the toxin spreads throughout the plant, contaminating seeds, nectar, leaves, pollen, roots and even surrounding soil and water.

4

Shrink your lawn, mow less often

Replace turfgrass with native ground covers, wildflowers or shrubs that feed wildlife and don't need expensive weekly care. At enormous effort and ecological cost, non-native turfgrass has become our largest irrigated U.S. crop, bigger than corn, wheat and fruit trees combined. To nurture it we douse it with chemicals, trim and sweep it with gas-guzzling, air-polluting mowers and blowers, and overwater using 30-60% of our municipal fresh water supplies.

If you keep some lawn, mow it less often, and let clovers and violets provide some nectar and seed. Mowing stops turfgrass from producing seeds or blooms, diminishing the limited food it could provide to wildlife.

5

Use rooftops to advantage, and maximize benefits of rainwater

Collect solar energy on sunny rooftops, or plant trees that add shade. They'll cut your air conditioning bills, shelter your home from winds, and capture carbon and stormwater.

Direct home and garage rooftop rainwater to where soil tends to be driest or where plants most need it, or capture downspout water in barrels or underground tanks for use in your garden.

Create a "dry creek," lined with pebbles, **or a rain garden**, using flood and drought tolerant plants to absorb and filter stormwater. Direct captured water to them.

Where you need hardscapes, make them permeable by using materials like gravel, permeable pavers, and by putting spaces between pavers. This reduces runoff that contributes to basement flooding and water pollution, and captures water that can benefit your plants.

6

Provide a water source for birds and butterflies

Provide a bird bath: they can be as simple as a plant dish less than 3 inches deep. Situate birdbaths near shrubs or small trees for quick cover from hawks or cats. Freshen birdbaths weekly to remove droppings and disrupt mosquito larvae, or daily in hot weather or when in heavy use. Keep them usable in winter with an electric heating coil or bubbler that melts ice. If you have a pond, add native minnows, like fatheads, to eat mosquito larvae.

Provide a puddling station for butterflies to provide pollinators moisture and minerals. Puddling stations are essentially sand, dirt, and a little compost kept moist in a shallow dish, with stones on which butterflies can perch.

7

Reduce or shade nighttime light

Shade outdoor lights, use red or amber rather than white light, turn off non-essential lights, and — when light is needed — use light triggered by motion detectors. Bright lights confuse migratory birds, drawing them toward fatal window hazards and causing them to expend precious energy needed for migration. Resident birds also are affected: it can increase their breeding failure. Insects throng to outdoor lighting, where they are easy pickings for predators that kill and eat them at such unnaturally high levels it is impacting their overall populations.

8

Avoid deadly bird collisions into windows

Add elements to your windows that birds can see. If we are inviting birds to our yards, we need to take steps to avoid their deaths caused by window impact. Glass is invisible to them and invites collisions when it reflects trees, vegetation, bird feeders, water features or sky, shows a clear path through a building, or shows plants inside. Glass on terraces, balconies, corners and walkways also kill. Up to one billion birds per year die from crashing into glass windows.

Solutions are simple and inexpensive, such as — on the outside of the glass — use a ruler and ceramic pen or tempera paint to mark lines, or add 'birdtape' dots, hanging cords that move with the wind or external screens. Architects can incorporate fritted or etched glass into plans.

Questions? Email
Habitat@NaturalHabitatEvanston.Org

Take the Pollinator Pledge: Sign a different kind of 'petition' that lets the community know eco-friendly yard management matters. Spread the word with an optional yard sign. To order go to ***naturalhabitatevanston.org/takethepledge***

Natural Habitat Evanston aims to create a community culture that values, restores and conserves the natural habitat on which we and wildlife depend.