

How to Create

A Long-Term Green Corridor Action Plan

for Your Yard

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Aspetuck
Land Trust



Established 1966

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Introduction

What is the Green Corridor?

Aspetuck Land Trusts' Green Corridor aims to generate connectivity between protected natural areas, and privately owned lands (your backyard!). 85% of land in the United States is privately owned, meaning that preserving nature and wildlife depends on homeowners like you. Your yard plays an important role in your community, and in the world in supporting the environment. The Green Corridor asks homeowners to: plant native plants, rethink their lawn and avoid pesticides and herbicides.

What is this guide?

The aim of this guide is to provide homeowners who have the passion to transform their yard for the benefit of nature, with a comprehensive tool kit for actually completing it. Aspetuck Land Trust does not want to just motivate homeowners to sign the pledge; we want to support them in truly committing to the vision, and really make a change in our community and planet.



Aspetuck Land Trust Green Corridor

What Homeowners Can Do — Fact Sheet #1

Plant Natives on your property

Why plant natives?

Because gardening with natives is easier! They require less of everything and give back so much more! A native plant species is one that occurs naturally in a particular region. Our native wildlife and insects have developed over thousands of years with these native plants. The loss of our native plants has a direct impact on the declining populations of native wildlife and insects, including pollinators. We can reverse this trend by planting native plants!



Karalyn Lamb

What plants should I buy?

When you plant native plants that attract pollinators to your property (bees, butterflies, and moths), you are also providing a food source, like caterpillars, for our native birds, and nectar and pollen for bees. This reconnects the food chain in our own backyards. Visit www.aspetucklandtrust.org for a list of optimal native plants, trees and shrubs recommended for Connecticut by Dr. Kim Stoner (Connecticut Agricultural Experiment Station) and Dr. Doug Tallamy (University of Delaware).

Where can I buy native plants?

Look for nurseries that stock 'Straight Species' Natives (not Nativars or Cultivars). Below are four Connecticut nurseries that provide the natives that we recommend:

Earth Tones Native Plants • 212 Grassy Hill Road, Woodbury, CT • www.earthtonesnatives.com

Gilberties Organics • 7 Sylvan Road, Westport, CT • www.gilbertiesorganics.com

Native, A Native Plant Nursery • 2940 Redding Road, Fairfield, CT • www.anativeplantnursery.com

Oliver Nurseries • 1159 Bronson Road, Fairfield, CT • www.olivernurseries.com

► To learn more visit: aspetucklandtrust.org/what-homeowners-can-do



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Green Corridor

What Homeowners Can Do — Fact Sheet #2

Rethink Your Lawn

Why should I rethink my lawn?

Traditional lawns are virtual deserts, providing no resources for nature and, when laden with chemicals, become a graveyard for biodiversity. Turf grass has become the #1 crop in the U.S., surpassing corn and soybean, yet it provides no food sources for humans or native species. You can transform your lawn into something that can provide greater benefit to your family and nature.



M.C. Fields

What changes can I make to my lawn?

- Reduce the size of your lawn.** Add native plant beds, shrubs, trees, or grassland and watch nature return.
- Mow high and water less.** This reduces weeds, better tolerates drought, strengthens root systems.
- Don't use artificial pesticides, herbicides or fertilizers.** These products harm the soil, streams and ponds, our families and pets, and our wildlife. There are no winners.
- Mulch the grass and leaves.** This recycles the nitrogen into the soil so you don't need fertilizers, making the soil healthy.
- Go electric!** It's cleaner and quieter, better for our health and the planet.

Who can help me make these changes?

The Aspetuck Land Trust website provides helpful resources (see link below):

- Healthy Yard Checklist.
- List of local NOFA Accredited Organic Land Care Professionals.
- Organic Lawncare Brochure and Booklet.
- Questions to ask your lawncare professional.

► To learn more visit: aspetucklandtrust.org/what-homeowners-can-do



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Aspetuck Land Trust Green Corridor

What Homeowners Can Do — Fact Sheet #3

Avoid Pesticide and Herbicide Use

Why are these products harmful?

Pesticides are a major factor in the “insect apocalypse” because they kill beneficial insects like pollinators, contaminate the soil, and end up in our water systems. Herbicides are included in the category of pesticides and, once thought to be safe, are now emerging as toxic to a variety of pollinators, birds, and humans. Residential use of these products exceed use in agriculture and has a direct impact on the health of our families as well as nature.



Square Space

What can I use instead?

- Use personal protective measures like appropriate clothing and body checks.
- Modify your landscape: remove barberry, move play areas away from woods, add a border of wood chips between lawn and woods.
- Plant native plants to attract beneficial insects remove weeds by hand or prune.
- Consider new methods like Tick Boxes-Tick Control System, Met-52 fungus and garlic oil.

Notes: Pyrethrins/Pyrethroids are toxic to bees, fish, cats, and other aquatic organisms.
Cedarwood Oil is toxic to fleas, ticks, mosquitos, but other toxicity has been unstudied.

Where can I find alternatives?

Aspetuck Land Trust provides helpful resources (see link below):

- Look for organic products that have the OMRI certification (Organic Materials Review Institute).
- Find a landscaper that is NOFA AOLCP certified (trained in organic methods and design).
- Let nature do its thing! The more native plants and animals, the less toxins in your backyard, the healthier and more biodiverse your property is ... no need for pesticides.

► To learn more visit: aspetucklandtrust.org/what-homeowners-can-do



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Creating a Long Term Plan

How to begin your garden and journey transforming your yard to a native safe-haven for wildlife and insects.

1.1 Identify the starting point location

This is important for remaining realistic, making the best use of your efforts, and actually achieving it. Remember, every little bit helps! Transforming a large yard into a native habitat can be a huge undertaking, and overwhelming to consider. So we can start small! Even planting one native tree can lead desirable insects and wildlife flocking to your yard; and overall connectivity from one natural space to another within the green corridor. The wildlife native to your region rely on native plants for food and shelter; and with so many non-natives being planted in people's yards, many insect and animal species have few options.

In addition to identifying the area you are starting with, also consider which areas you would like to expand to, and which areas you would like to leave for recreation, such as a patio, lawn space, or a pool. It is important to be strategic, and have the master plan in mind even in the beginning, so you can be as effective as possible. See the "create a garden plan" section (pg 10) for more information.

1.2 Identify the natural ecosystem

Every ecosystem has its unique native plants that have evolved to thrive in those conditions. The plants and species that love your wetlands may be very different from those who would appreciate your neighbor's dry soil. What plants and animals would be living in your yard if it was completely untouched? What kind of habitats are possible in your yard, considering all aspects? It's best to work with what we have to have the greatest outcome of success.

The beautiful thing about planting natives is that there are amazing and gorgeous plants native to every habitat and every backyard condition. This is because they have evolved in these conditions and adapted to them. Ornamental plants from a nursery, however, require a specific soil type that likely needs to be bought from the store, and constant watering and care.

1.2.1 Sun and Shade

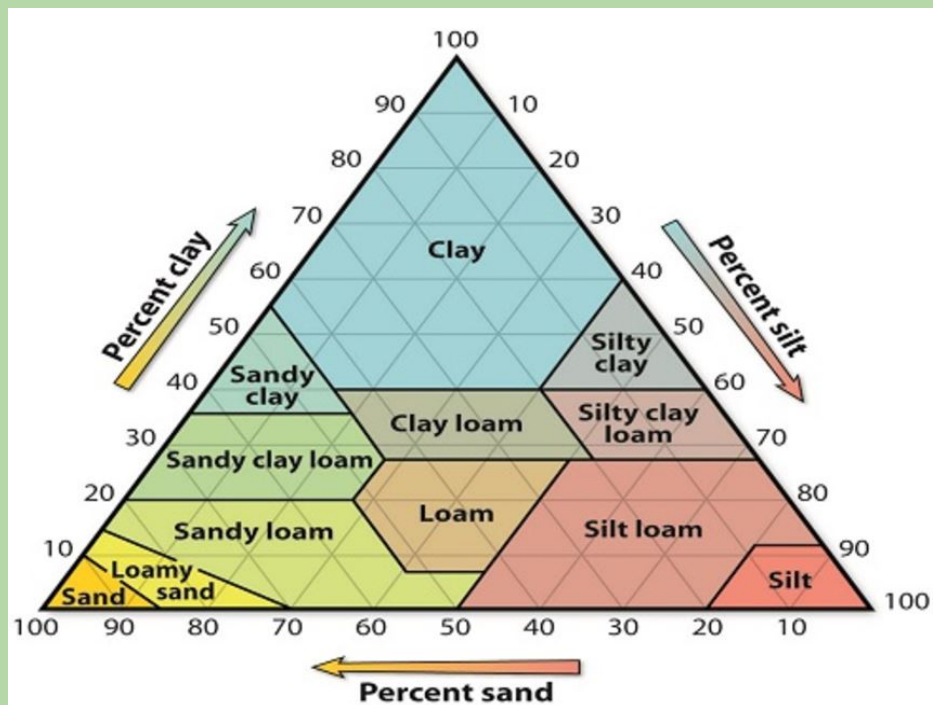
Observe the sun and shade in your yard throughout the day and plan accordingly. More than six hours of sun is suitable for full-sun plants. Consider how sunlight changes through the seasons.



1.2.2 Soil

The soil is the environment your plants are setting their roots in and getting nutrients from. By understanding soil pH, texture, composition, drainage, acidity, and mineral density, you can find plants that are suitable upfront without a potentially disappointing “try it and see” approach. There are beautiful plants for every soil condition; we just want to find which ones they are before the money and effort is spent.

Soil Composition Chart



Soil Composition: The Squeeze Test

Soils are classified as clay soils, sandy soils, or loamy soils. Clay is nutrient-rich, but slow draining. Sand drains quickly but poorly retains nutrients and moisture. Loam retains moisture and nutrients but doesn't stay soggy. Here is a simple way to test your soil.

- Take a handful of moist (not wet) soil from your garden location, and firmly squeeze it. One of three things will happen
 1. It will hold its shape, and when you give it a light poke, it crumbles. This means you have loamy soil.
 2. It will hold its shape, and, when poked, does not change shape. This means you have clay soil.
 3. It will fall apart as soon as you open your hand. This means you have sandy soil.



Soil Drainage: Percolation Test

It's important to understand the drainage of your soil; that way you know how wet your roots are after watering or a rainstorm. Some plants love wet feet, while others will die in those conditions.

1. Dig a hole six inches wide, one foot deep
2. Fill the hole with water and let it drain completely
3. Fill it with water again
4. Keep track of how long it takes for the water to drain
 - a. If the water takes more than four hours to drain, you have poor drainage; many beautiful native plants LOVE this soil condition.

Soil acidity: pH Test

The pH level of your soil is an important factor in plant growth. While certain plants grow in a higher or lower acidity level, most plants grow in a fairly neutral pH between 6 and 7. Finding the natural pH of your soil can be helpful in selecting plants, and if you discover your soil's pH is way too high or too low, you can work to solve a problem before you begin planting.

- Every home and garden center carries pH test kits. These kits are fairly accurate, but you must make sure you follow the testing instructions precisely.

How to get a detailed soil report

If you find you need more information on your soil condition, contact your local cooperative extension service. They will tell you how to go about collecting a soil sample and sending it into their lab for analysis. They will return a report that will alert you to any mineral deficiencies in your soil, as well as steps to correct the issues.

1.2.3 Moisture

Moisture levels in one area of your yard may be very different from the condition a few meters away, especially if there are changes in topography. Although it is possible to continuously water dry areas to make them more wet as many of us do in our gardens, to create a natural habitat that "takes care of itself" (it's possible; it happens all around you!), we want to get a good understanding of its current condition and let that lead us.

- Estimate soil moisture by look and feel
 1. Stick your finger 1–2 inches (2.5–5.1 cm) into the soil. If the soil feels dry or if it falls off of your finger when you remove it, the soil may be dry. If the soil feels moist or if the soil sticks to your finger, the soil may be moist.
 2. If it's a light color, such as tan, and/or is hard and compacted together, then your soil is most likely on the drier side.
 3. Dry soil may not hold its shape, but moist soil can sustain and hold its shape while being felt in the hand.

- Purchase a soil moisture probe.
 - A basic model is approximately \$10-20 at your local hardware store, but there are more expensive models with further capabilities.
- Notice natural features
 - Is there a stream or other water body in your yard? Is it naturally a muddy wetland? This also creates a great opportunity for providing a specific habitat with unique plant and animal species. Keep in mind how this changes through the seasons.

1.3 Identify Current Plant and Animal Residents

Observe the natural pieces of the environment, if there are any, around your property and neighborhood. What plant species are there? They can inform you on a variety of environmental conditions surrounding your yard. All species have certain criteria they need to thrive, so finding the native species which are doing well in your yard may inform you on how moist your soil is, how much sun is available, how acidic your soil is... and you can look for species that require similar criteria. The species you find may even be the ones you want to incorporate into your own yard!! Notice what kinds of birds, insects, and mammals frequent your yard. You can find plants to support these species as a part of the food web, or you may be able to identify key problems (such as deer) and implement a solution before they start munching on your new native landscape! Also, note if you have any plants that are already popular with insects and wildlife; that indicates a plant you may want to leave. You may have overgrown areas of vegetation which are providing shelter for wildlife. Identify all existing features of wildlife value and think about how they can be enhanced.

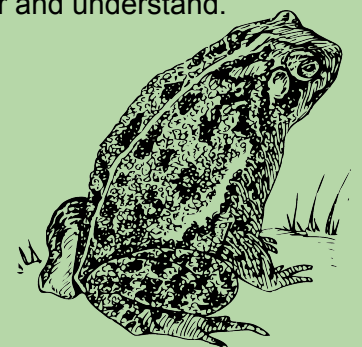
PRO-TIP: Phone apps such as [Seek](#) can be helpful for identifying plant and insect species, and [Merlin Bird ID](#) is great for recording bird songs and identifying their species.

2.0 Create a yard plan

2.1 Map out your outdoor landscape

Begin with a large piece of paper; the larger the better. A sketchbook is great because it's both big and portable enough to take on a walk around the property with.

Sketch existing structures, including your house, walls, gates, fences and where the edge of your yard meets the natural landscape. It doesn't have to be precise at this point—having a rough estimate is fine. You could use a tape measure if you choose, but simply pacing it out works just as well. Make a detailed sketch so that you can refer back to it later and understand.



2.2 Create a vision

List the strengths, weaknesses, opportunities, and threats in your existing yard, called a SWOT analysis. This can help you determine some goals and create a true vision for your landscape. The more you practice this exercise, the more design opportunities and solutions will present themselves!

<p style="text-align: center;">Strengths of existing yard</p> <p>Like the 2 native trees; keep those</p> <p>I already have some milkweed which brings in butterflies</p> <p>Decent mix of full sun and shade</p>	<p style="text-align: center;">Weaknesses of existing yard</p> <p>Wet, muddy spot; (plant some water-loving plants to absorb it)</p> <p>Large lawn; doesn't attract butterflies</p> <p>Neighbor's shed is ugly; lets cover that with native trees</p>
<p style="text-align: center;">Opportunities and wish list</p> <p>Stream in front; could enhance this wetland habitat</p> <p>Forest edge; would love to expand the forest habitat into my yard by providing food and shelter in the form of native plants</p> <p>Running water feature; gentle noise and attracts birds</p>	<p style="text-align: center;">Threats to the landscape</p> <p>Invasive plant: patch of mugwort I should remove before it takes over</p> <p>I know deer are overpopulated in my area; should put up a deer fence</p>

2.3 Goal-set

Outline some additional major goals for your yard. Maybe you want to attract more butterflies and bees, or maybe you want some more birds at your feeder. Once you identify the goals of your yard, it is easier to identify what plants to include to reach those goals. For example, most insects, like butterflies, have a specific host plant that they only lay their eggs on, so you must include that in your yard to attract them!

Remember to incorporate the three goals of the Green Corridor Pledge: Plant more natives, rethink your lawn, and reduce pesticide and herbicide use!

2.4 Design your garden and yard habitat!

It's important to create a plan prior to beginning your plantings to ensure greater success. In addition to brainstorming, we recommend returning to your initial sketch of the property and adding in your design plan for new plantings.

Return to the sketch you created of the existing features in your yard and garden. Consider the “flow” of one habitat area to the next, and if there is enough room in your yard for the design. Consider what the focal points of the yard are.

2.4.1 Transitional habitats and ecotones


Some of the most valuable wildlife habitat is where two different habitats meet. For instance, where a pond meets a meadow or woodland meets scrubland. These transitional habitats (or ecotones) can be extremely rich in wildlife species. Effective backyard wildlife gardens extend the transition zone between habitats, rather than mowing right up to the forest edge, for example. These transition zones are excellent opportunities for a native garden, and we recommend they should be enhanced.

2.4.2 Design for succession of blooms


If you want color in your yard year-round, choose plants that bloom or have bright berries and foliage at different times of the year to retain visual interest no matter the season. This will also provide food and resources for wildlife and insects in all seasons!

HELP SUPPORT POLLINATORS AND PROVIDE WILDLIFE HABITAT BY PLANTING NATIVE PLANTS

PERENNIAL PLANTS	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER
<i>Caltha palustris</i> Marsh Marigold							
<i>Taraxacum officinale</i> Running Tapestry™ Foam Flower							
<i>Zizia aurea</i> Heart-leaved Alexanders							
<i>Zizia aurea</i> Golden Alexanders							
<i>Geum triflorum</i> Barren Strawberry							
<i>Sedum ternatum</i> Three leaved Stonecrop							
<i>Ficaria verna</i> Roundleaf Ragwort							
<i>Parthenocissis vitacea</i> Husker Red™							
<i>Asplenium platyneuron</i> Blue Eyed Grass							
<i>Asplenium platyneuron</i> Swamp Milkweed							
<i>Asplenium platyneuron</i> Butterfly Weed							
<i>Heuchera americana</i> Dale's Strain™							
<i>Heuchera americana</i> Coral Bells							
<i>Iris versicolor</i> Blue Flag Iris							
<i>Delphinium</i> Southern Bell							
<i>Coreopsis verticillata</i> spp. Tickseed							
<i>Echinacea purpurea</i> spp. Purple Cone Flower							
<i>Liatris spicata</i> Gayfeather, Blazing Star							
<i>Euthyone purpureum</i> spp. Joe Pye Weed							
<i>Heliopsis scabra</i> Summer Nights False Sunflower							
<i>Rubus</i> spp. Black-eyed Susan							
<i>Chelone lyonii</i> Hot Lips™ Turtlehead							
<i>Lobelia cardinalis</i> Cardinal Flower							
<i>Veronica novboracensis</i> New York Ironweed							
<i>Physocarpus opulifolius</i> Vivid™							
<i>Symphoricarpos</i> New England Aster							



NATIVE PERENNIALS WILDFLOWER PRESERVE
297 WESTWAY ROAD SOUTHPORT, CT


www.aspetucklandtrust.org

Land Canvas Landscape Architecture
www.landcanvasla.com

PHENOLOGICAL CALENDAR FOR PERENNIALS
 Bloom dates vary with weather and specific site conditions including sun exposure, soil composition and moisture.



2.4.3 Plant a Polyculture

Plant a variety of different species in your yard, compared to a majority of one or two types. Planting a variety welcomes a variety of insects and wildlife, and helps prevent the possibility of a single unwelcome species completely taking over. A true variety of plants has species from different families, and with different heights, structure, growing and fruiting seasons.

2.4.4 Group similar plants together

An important tip is to plant your natives in groups, rather than as individual, isolated plants scattered throughout the yard. Especially if you are planting the same species, it is helpful to plant these next to each other, as this is how plants grow naturally, promotes better habitat quality, and helps prevent weeds.

2.4.5 Consider the experience

Are you aiming to establish a garden? Maybe you want definitive borders to help your garden look more clean and intentional. Maybe you're trying to make a meadow, where borders are not a necessity and you let the beauty of nature establish itself. If you are including forest habitat, consider where you are establishing dense shade and the transition of that habitat to other areas; make a path to take you and your guests on a journey through your yard.

2.4.6 Keep your plants in scale

Choose plants that don't grow taller than half the bed width. So if your display bed is six feet wide, choose plants that are no more than three feet tall. This will help with definition and give your garden a more intentional look.

PRO-TIP! Save time by utilizing the many garden and hedgerow plans Aspetuck Land Trust has created for you: [Native Garden Plans](#) and [Native Hedgerow Plans](#)

2.5 Choose the plants

The backbone of any ecosystem begins with the vegetation—the very beginning of the food web and the structure wildlife and insects require for a place to rest, feed, and raise young. Native plants support wildlife within your area the best, because these are the plants that animals have evolved with and co-depend on. Non-native plants are unfamiliar to wildlife and insects, and do not provide the same kind of support. Additionally, plants native to your region are well adapted to its soil and climate, and will require less constant care than ornamental non-natives. Now that you have completed the research on your yard to understand the soil type, sun and shade extents, and moisture levels, among other important criteria, it is time to pick the plants that will thrive best in your yard while meeting your personal goals.

Resources for researching natives to buy

The National Audubon Society maintains a comprehensive [Native Plants Database](#) that is searchable by ZIP code and can be filtered based on the types of plants you are interested in planting. The National Wildlife Federation also maintains a Native Plant Finder that is [searchable by ZIP code](#).

Plant Terminology You Should Know

Native- A plant which has evolved within its region and adapted to that region's climate, soil, and wildlife by natural selection, with no human interference.

Cultivar- A "cultivated variety" that has been bred by humans to meet certain desirable characteristics such as color, bloom size, fragrance, etc. Cultivars often do not support insects and wildlife.

Nativar- A species which was originally native, but then bred by humans for desirable characteristics. Ecologically, it may be just as bad as cultivars or potentially worse, because it has more capabilities of establishing itself and becoming widespread.

Invasive- A plant from another region which has established itself in a region which it has not historically evolved in, and has become widespread, and due to this causes significant damage to the ecosystem and/or human health. The USDA hosts a [list of federally recognized invasive species](#), although there are many invasives which are not on this list.

Aggressive/Weedy Species- Species which grow vigorously, and can often take over an area. Many aggressive and weedy species are spectacular natives which provide significant support to wildlife and insects, such as virginia creeper. If the species is native, it has natural predators which keep it in check, and those natural predators depend on the plant for nutrients, shelter, among other possibilities.

Ecotype- A native species which was grown from seed within a specific region, ensuring its genetics both match and remain within the region it originated from. For example, some natives may be native to the entire East Coast, but there are likely important genetic differences within that same species from the population in Florida compared to the population in Maine. Check out [Wild Seed Project](#) or [The Ecotype Project](#).

Be aware that many sources misuse terms such as "invasive." It is impossible for a native species to be invasive!

Trees

Trees are the real backbone of a varied wildlife habitat in your yard. Trees provide both food and shelter for a variety of species, so they are vital in a healthy backyard wildlife habitat. We recommend planting a variety of trees that provide wildlife value in different seasons (mostly meaning food!). Different tree species' fruits ripen at different points in the year, so consider planting trees that bear ripe fruit in different seasons. Native trees for the spring include cherry, mulberry and serviceberry trees, while dogwood, magnolia, spicebush and sassafras are good fall options. Evergreen trees, and even shrubs and bushes, also prove beneficial to animals, including birds and small mammals, in the winter. Because they remain green and full all year, evergreens offer good shelter from weather and predators for wildlife in your yard, so don't forget to include them in your landscape. Some ideal native evergreens are American Holly and Winterberry. Oak trees are one of the most important types of tree in our region as they support hundreds of species.

Bushes and Shrubs

An enriching force in the landscape, native shrubs are ideal for creating sheltering habitat for birds along with a bounty of berries or nuts in the fall. Pollinators find easy, ample foraging on the plentiful blooms. Shrubs are frequently host plants, as well, and play an important role in the life cycle of numerous butterflies and moths.

Flowers

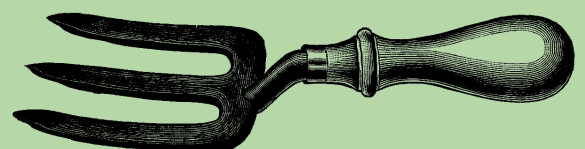
The main function of flowers is to attract pollinators, such as bees, butterflies, bats and hummingbirds, so plants can reproduce. Many plants and pollinators have a mutually beneficial relationship, where the pollinators also receive nutrition from the nectar and pollen. Plant native flowers which are known to have pollinator value to provide nutrition for our valuable pollinators.

Grasses

The grass that covers most people's lawns is a non-native mix which provides no food or shelter for wildlife and insects. There are native grasses that are beneficial to wildlife, and can be added to the landscape to offer a more varied habitat. These grasses will add visual interest to your yard, and they also require little to no maintenance once they are established. Native grasses can also prevent soil erosion, provide good cover and shelter for wildlife like birds and small mammals, and create seed heads that birds and other animals will eat. Some good choices for native grasses to incorporate into your yard include switch grass, little bluestem, Indian grass and big bluestem.

Ferns

Ferns, though often overlooked in gardening, are a key part of a balanced environment. Ferns are excellent for wet and shady spots, although some can thrive in the sun. Ferns can give structure that provides foraging space and shelter for ground-feeding birds, while other critters, for example frogs and turtles, like to hide in them. Ferns are generally resistant to browsing by rabbits.



3.0 Multi-year plan

A common misconception with native landscapes is that the best practice is to “let it be,” and let it grow completely wild. However, habitats need to be continually managed to ensure they stay in good condition. Managing a native landscape is carried out on a much lower frequency than conventional weekly or daily garden maintenance. However, at the same time is a much more complex system that requires a more nuanced and wide-scope view to be approached correctly.

START with considering your end goal, then what you can reasonably accomplish within one year. Create a list of tasks to complete within each season that you believe you can manage given your time and resources, and continue outlining each step until you have completed your “dream garden” (though this process seldom ends!) Aside from continual expansion of your garden habitat, there are also tasks that must be completed on a schedule to keep up with its management.

You are more likely to achieve a goal when you write it down and break it down into a manageable timeline. Write up a management plan for each habitat you are creating in your yard.

Tasks to include in your multi-year plan include

- Purchasing and installation of new plants
- Removing invasive plants
- Installation of additional features
- Maintenance tasks (weeding, mowing, trimming)



4.0 What to do in each season

Spring: Building your garden during growing season

- Resist the urge to “spring clean” too early. Fallen leaves in garden beds provide year-round habitat for snails (their calcium-rich shells promote egg strength), insects, and salamanders (which need insects to eat), harbor moth cocoons, and many other animals. Once nighttime temperatures consistently reach 50 degrees for over a week, you may remove fallen leaves.
- When the ground thaws and the air temperature warms, begin planting native perennials and grasses. A general rule of thumb is to begin planting after a region’s last frost date.
 - Wait until last year’s plants have returned before planting new plants to avoid overcrowding.
- Weed invasive and non-native plants, given that you can properly identify them. Try not to accidentally pull native plant seedlings!
 - Consider cutting weeds instead of pulling, as ripping out these weeds may damage the root systems of nearby desirable plants, especially if they are young.

- In early spring, instead of cutting back last year's vegetation to the ground, cut back spent seed heads and grass stems to stubble of varying heights (8" to 24" tall) to provide nesting cavities in which stem-nesting native bees will lay eggs at different times during the growing season. The larvae will develop over a year and adults will emerge from the stems the following growing season.
- Consistently water new plantings while their roots begin to get accustomed to the new home, especially when temperatures are high.

Summer: Maintaining your garden during extreme temperatures

- Weed out non-natives, and if natives begin to become too plentiful, consider expanding the garden or transporting the seedlings.
- In mid summer, plant new natives if desired to fill in any empty spaces in your yard and garden.
- Deeply water new plantings. If rain is not plentiful, consider augmenting with an extra 1 inch of water at least once a week.
- Deadhead minimally. If you choose to deadhead, keep in mind that you will reduce seed sources for birds to eat.
- Vigorous, unwanted limbs should be removed or shortened on new trees. Watch for forks in the main trunk and remove the least desirable leader as soon as it is noticed.
- Inspect plants for disease, specifically aster yellow virus, which affects plants in the Aster family including coneflowers, blazingstars, and black-eyed susans. If found, remove diseased plant material by digging the entire plant and disposing in trash; do not compost.
- Inspect plants for aphids and other nuisance (non-native) insects, and remove by killing (avoid applying pesticides)!

Fall: Plant trees and grasses; prepare your yard and wildlife for harsh winter

- Once the heat of summer has passed, early to mid fall is a good time to plant native perennials and grasses. Make sure to water them in well.
- Early fall is a good time to divide and move perennials and grasses.
- As trees begin to drop their leaves, leave them be! Let them stay there until spring, as dropped leaves are important habitat for insects and arthropods which are the basis of the food web.
- Plant deciduous trees once they have entered dormancy (dropped their leaves).
- Plant an oak by finding dropped white oak acorns and planting them in a pot. (Oak acorns in the red-oak family can be kept in the fridge with peat moss until the spring) Leave them and water them in a protected area where they are still exposed to outdoor temperatures, such as a garage, and replant after the first summer.

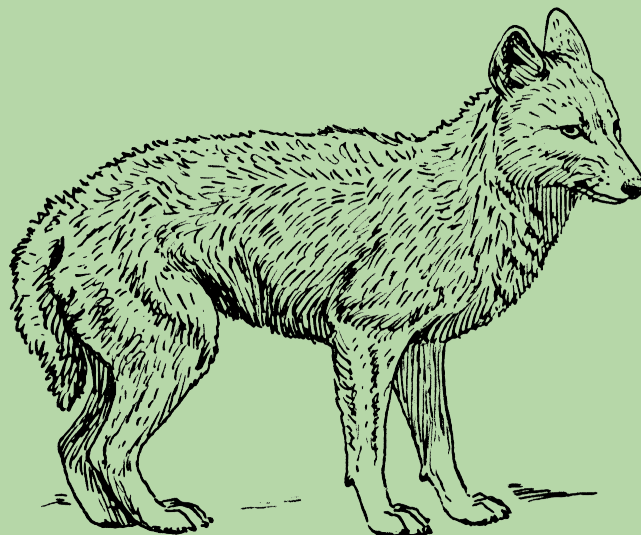
- Rodents and other wildlife consume acorns, and often oaks do not make it through the winter. By planting some in a pot, you can ensure their survival (and get a free new plant!)
- Leave seeds and fruits on native plants through the fall and into the winter as they are good food and shelter sources for birds and add visual interest for you throughout the winter.
- Leave spent vegetation standing for winter interest and to provide seeds/shelter for birds and other animals in winter.
- Clean out bird houses in fall or winter.

Winter: Protect plants and support wildlife during extreme months

- Water newly planted trees and shrubs if a week goes by without adequate moisture (less than 1 inch) or if the wind blows strongly for several days in a row, trees and shrubs can become desiccated and/or stressed. Use a hose (or watering can) and soak the soil around each newly planted shrub and tree, pausing over the roots for at least 10 to 20 seconds. This small contribution of moisture will yield a tenfold reward when the tree buds open in spring.
- Leave grass and herbaceous perennials standing in winter to provide cover food, and nesting material for wildlife. Brush piles and stumps also provide habitat for many overwintering creatures.
- Reduce use of salt when you can, as it can poison your plants and leach into the water source
- Protect young trees from rodents and deer, which feed on them due to winter food shortages. Young trees are more susceptible to death from herbivory.

*One more important consideration for the seasonality of undertaking large projects is the disturbance that we may cause wildlife. For example, avoid removing trees in winter when bats may be using them for shelter, and consider timing of removing invasive plants before they produce reproductive organs (berries, seeds) to minimize their spread. Make sure to consider all aspects and talk to a professional before beginning such a project.

For more detailed information: <https://grownative.org/learn/native-landscape-care-calendar/>



5.0 Habitat-Specific Management Plan Resources

Please utilize the below resources to guide you through establishing or enhancing the habitat you have in mind.

Meadow

- [Establish a Native Meadow \(Audubon Society\)](#)
- [Yard Native Meadow and Prairie \(Fern Creek Design and Build\)](#)
- [Planting Wildflower Meadows \(UCONN\)](#)
- [Making a Meadow \(Meadows and More\)](#)

Woodlands

- [Grow a forest in your backyard \(Piedmont Master Gardeners\)](#)
- [Woodland Garden \(Fern Creek Design and Build\)](#)
- [Woodlands in Your Backyard \(Maine Government\)](#)
- [Guide for Woodland Owners](#)

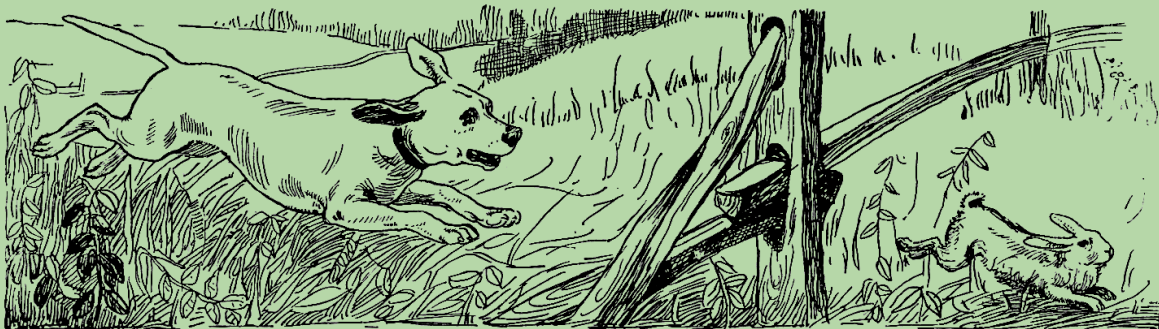
Wetlands

- [Backyard Wetlands \(Do it Yourself\)](#)
- [Restore Wetlands on Your Land \(Growing with Nature\)](#)
- [Wetlands Garden \(Fern Creek Design and Build\)](#)
- [Rain Garden \(Fern Creek Design and Build\)](#)
- [Backyard Pond \(Fern Creek Design and Build\)](#)



6.0 Interesting yard features to consider

Other than plants, there are many other additions to your yard that can help attract and support wildlife and pollinators. These critters require shelter, food, and places to raise young, so any structures to support those necessities can be exciting additions to your yard. There are also yard improvements that can be made to promote your personal enjoyment of your yard. We will discuss those here.



Birdfeeders

Birdfeeders provide a vital supplement to birds' diets, especially in winter when food is scarce. Birds are excellent pollinators, perform insect control, and are exciting to watch! Different types of seed mixes attract different species of birds depending on their diet. Different feeder shapes are also important, because depending on different species' size, foot and bill structure, only certain feeder shapes are accessible. For a diverse range of bird species visiting your home, set up multiple feeders composed of different seed mixes, as well as different feeder shapes.

Remember to refill your feeders periodically so birds understand your yard is a reliable source. It is also imperative to monitor your feeder for diseased birds, as a feeder can be an disastrously effective vector of disease.

Bird Houses

In addition to food, birds require places to breed. Consider setting up some bird houses dedicated for specific species in mind, so a bird may use them as a nesting site to raise their young. It's exciting to watch life happen; you can even install a small camera with a video feed! There are bird houses specific for owls, ducks, and of course the classic backyard birds. We hope to try to boost the populations of sensitive native species, and if possible avoid invasive species such as house sparrows from taking residence.

Remember that all native and migratory birds in North America, including their eggs, are federally protected.

Bat Box

Bats are incredible pollinators, agents of mosquito and insect control, they help distribute seeds, AND the bat guano (poop) will do wonders as a fertilizer in your garden. Bats are cute, friendly animals that play a vital role in the ecosystem, and happen to be extremely vulnerable. Bat boxes are easy to make yourself and install, but must be placed in the right location. One bat house can house up to 200 bats!

- Keep the house high up. Bats prefer to live about 15-20 feet off the ground.
- Never place the bat house near a tree. Trees and branches attract bat predators. So bats will not live near them.
- The closer to water your property is the better a chance you'll attract female bats; which is necessary for a large colony. A "bachelor" bat house is also possible if you are not in proximity to fresh water, but won't house as many bats.
- The color of your bat house matters. Hues will vary depending on climate.
- Sunlight is vital. You'll need 2-8 hours of direct sun on the bat house. This usually means facing the front of the house to the SE or SW.
- Testing matters. Make sure you can move the bat house around to different locations until bats show up. Bats are wild animals. So you may have to experiment a bit.



Water Feature

All life depends on fresh water, so having a source, especially when the sound of running water is audible, will attract all sorts of critters to your backyard habitat. A small water source such as a bird bath will (of course) attract birds and insects looking for a drink, and a larger wetland water feature on the ground will attract frogs and salamanders.

Walking path

Once you have established a beautiful native landscape in your yard, what better way to enjoy it but a walking path? This feature can enable you easy access to each feature of your yard, and sticking to this path most of the time will also leave enough space between you and the critters enjoying the habitat—limiting wildlife disturbance. Especially shy and sensitive wildlife species will only make a home where they feel safe, with limited human disturbance.

Wildlife viewing zones

Wildlife viewing zones are a perfect way to facilitate exciting wildlife encounters within your design. If you're working on a wetland habitat, it would be great to add in a raised platform for observation. It is also possible to create structures to enable wildlife viewing without startling the animals in important feeding areas. Such locations are suitable for wildlife photography as well.



7.0 Management Problems and Solutions

Deer management

One thing to know about planting natives for wildlife in mind is that there are of course some animal species such as deer who unwantedly utilize our plants as a food resource. Deer, too, have evolved with our native plants and often find them tastier, but can decimate native gardens because their populations are out of control and have limited food resources. Effective strategies include:

Planting Deer-Resistant

Some natives are not preferred by deer; however, many “deer resistant” plants have now become a part of the desperate deer’s diet. I suggest thorough research and consulting with your gardening neighbors, as habits of deer differ among sub-populations. Oftentimes, deer-resistant plants are browsed anyway, so it's best to add in additional precautionary tools, especially in areas of known high populations.

Fencing and Barriers

A deer fence of at least 8 feet (and buried 6-12 in. underground) is the only truly reliable way to exclude deer from a landscape, so long as that fence is maintained! There are also alternate fencing and physical barriers that have been known to be effective against deer; such as micro-exlosures, fishing line/paracords, and plant-specific protection where singular plants or sections are fenced in.

Deer Repellent

Repellent made from predator (coyote or bobcat) urine is known to be the most effective at deterring deer. There are also home-made solutions that can be effective at deterring deer, as well as store varieties. Remember to check the ingredients of any repellent you use in your yard and avoid harsh chemicals that can damage the environment. Also remember that predator urine that deters deer will also affect many other wildlife species!

[This is an excellent resource regarding solutions for gardening with \(against\) deer](#)

Insect Control

The Green Corridor asks partners to avoid pesticides, so what to do about those pesky insects that eat your plants? Remember, pesticides kill beneficial insects as well as noxious species, and can be harmful to other animals including your pet, your children, and yourself! Even a home-made eco-friendly insect repellent can repel the “good insects” too, so use sparingly if at all! One exciting solution is that the more native plants, the more you will invite beneficial insects as well as predators such as birds, bats and garter snakes which will help control the problem insects.

Hand Pull

For aphid infestations, or problem-species like the destructive japanese beetle, take a paper towel or your bare hand to pick or wipe them off the leaves. It's recommended to kill invasive insect species. By paying attention to your plants, you can keep problems at bay in this manner; and is more direct with no confounding impacts unlike pesticides!

Invite natural predators

Native spiders and ladybugs will control your insect problems in the most natural way: by eating them! By not killing little insects, there is a stable food source for native predator insects, and

their populations can begin to climb; then their predators like birds and small mammals can begin showing up! You can facilitate the appearance of natural predators by the plant species you choose for your garden.

Plant a Polyculture

One insect species (usually an unfriendly one!) dominates when only one kind of plant is planted within a large stretch (monoculture). When you plant multiple native species, no one species is able to completely dominate, and native plant, insect and wildlife species which are accustomed to a diverse plant variety are able to thrive! Planting a polyculture is the foundation of a balanced garden ecosystem.

Insect Control Resources:

<https://homeguides.sfgate.com/safe-pest-control-butterfly-garden-21624.html>

<https://www.growingwithnature.org/control-garden-pests-without-chemicals/>

Weed Control

The Green Corridor asks partners to avoid herbicides, so what to do about the weeds that just seem to take over? The first step is to re-think your definition of weeds. Many plants you may have been battling out of your yard such as jewelweed, goldenrods, and virginia creeper are actually native plants that wildlife and insects love! Before pulling any plant, be sure you know what it is!

- Patrol garden weekly for weeds, and keep the problem at bay before the weeds create deep roots.
 - Once the garden has matured, weeds will become less and less of an issue.
- “Crowd out” weeds by planting plants closer together.
- Lay down a barrier (matte newsprint, other weed barrier cloth), and put your soil on top.
 - This works great in small gardens with extreme weed problems but isn’t feasible in all cases.

Weed Control Resources:

<https://www.gardeningknowhow.com/plant-problems/weeds/controlling-native-garden-weeds.htm>

Invasive Species

Invasive species are one of the major threats to biodiversity worldwide. To be the best steward of the land we can, we should look out for and control invasives whenever possible. The most important part of controlling an invasive species outbreak is early detection, because once the plant, insect, (or other type of species) becomes established, it can become incredibly difficult to control, and often impossible to completely eliminate.

Each invasive species has a particular “most effective” method for controlling. There are certain times of the year (generally before the plant begins reproducing) when it is best to remove it. Learn the species-specific removal method and tackle it as soon as possible to avoid a future headache! Become familiar with the invasive species within your area and look out for them in your yard.

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