GUIDE TO 1000 YARDS CAMPAIGN

Village of BELLPORT

Bellport Environment Committee

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April 2023

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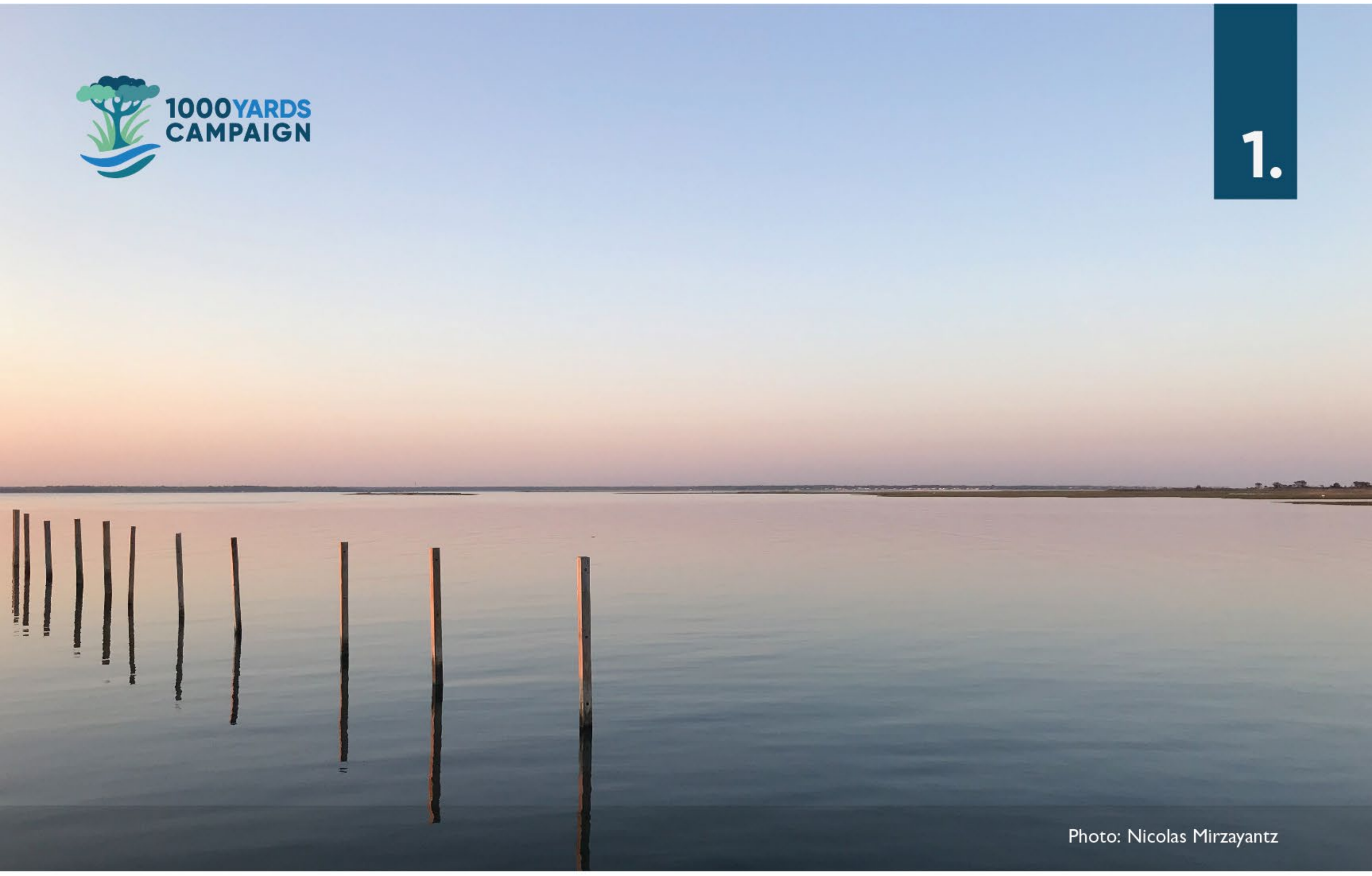

Photo: Nicolas Mirzayantz

THE 1000 YARDS CAMPAIGN

Bellport is a lovely place to live — the ocean, the bay and the serene and inspiring natural world that surrounds us. But beautiful Bellport is not immune from environmental crises such as the pollution that is blighting our bay and the disappearance of vital creatures such as butterflies, birds and bees.

Why We Need the 1000 Yards Campaign | Protecting the Health of Bellport Bay

The natural closing of the Fire Island breach — opened by Superstorm Sandy in 2012 — has brought new urgency to the issue of land-based pollutants entering the bay. We can no longer count on twice-daily exchanges of water between the ocean and the bay to mitigate noxious tides and algae blooms that are dangerous to plants, shellfish, fish, pets and humans alike.

Many of the bay's problems can be traced to excess nitrogen that fuels algae blooms, which in turn deprive the bay of oxygen needed by other living creatures. A key cause of excess nitrogen is the use of high-nitrogen, quick-release fertilizers on our lawns.

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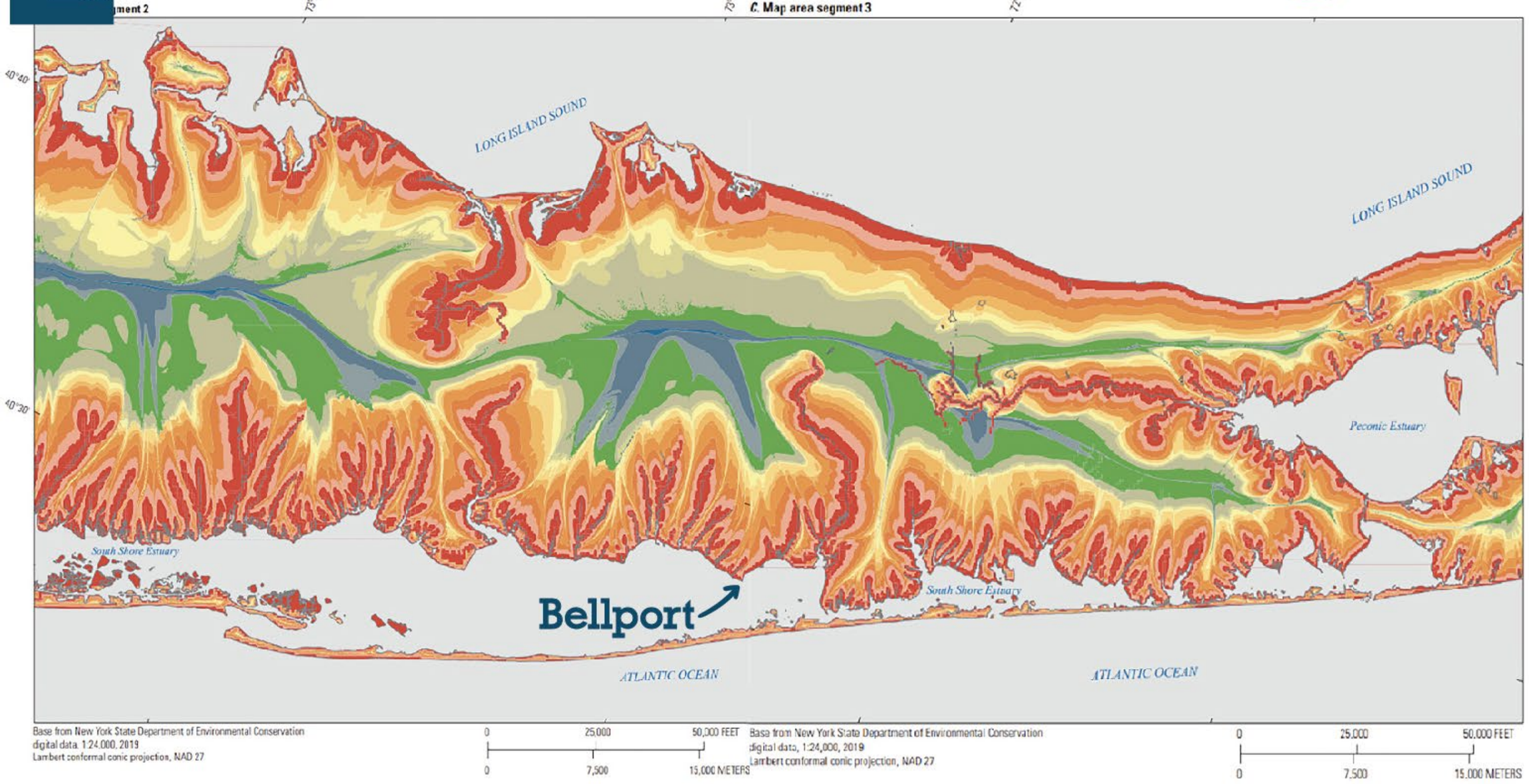
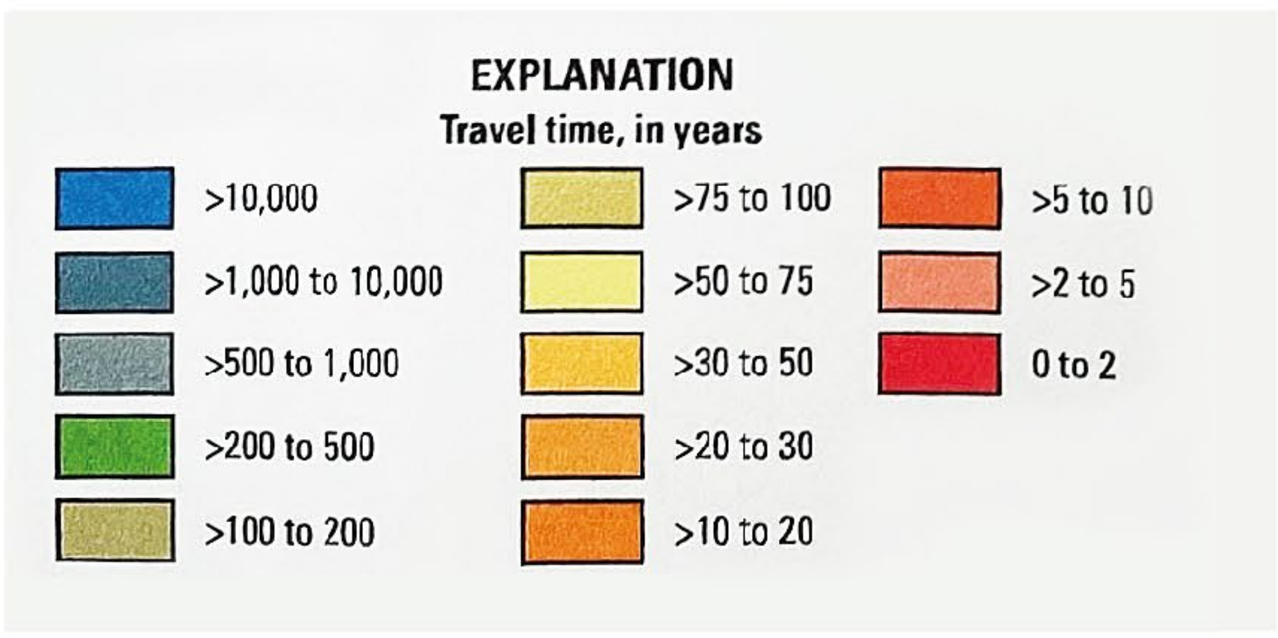


Fertilizers that we use in our yards seep into groundwater and then travel to the bay via the water table. This map shows that every home in Bellport is in one of the red, orange or pink-colored areas where fertilizer applied to lawns most impacts the bay. Source: New York State Department of Environmental Conservation.



Excess nitrogen from lawn fertilizers reaches the bay in one of two ways. One, it seeps into the groundwater, where it migrates through the water table to the bay. According to the map above, published by the New York State Department of Environmental Conservation, every lawn in Bellport is close enough to the bay to contribute excess nitrogen. Two, rain washes fertilizer off our lawns into Village streets, where it enters storm drains that discharge directly into the bay or into creeks that flow into the bay.

Overfertilizing lawns, a major factor aggravating pollution in the bay, is a problem entirely within the control of every Bellport Village resident. This guide provides clear, actionable information about how to keep our lawns green and healthy without overfertilizing them and without using pesticides and herbicides that further pollute the bay.

Creating Habitat for Butterflies, Birds and Bees

We are witnessing a worldwide crashing of bird populations, as well as steep declines in populations of insects such as bees and butterflies that pollinate plants, enrich soils and provide a critical protein source for species up the food chain.

Studies have found that bird populations have declined by nearly 3 billion across the U.S. and Canada, while monarch butterfly and American bumblebee populations have declined by 80% to 90% in the Eastern U.S. in recent years. The U.S. Forest Service sums up our situation this way: "Without pollinators, the human race and all of earth's terrestrial ecosystems will not survive." Two of the main reasons these vital creatures are disappearing are use of pesticides and destruction of their habitats.

We can stop using pesticides on our lawns, but to create more habitat we must recognize that not all plants are created equal when it comes to supporting wildlife. This guide provides clear, actionable information on how to plant native trees, perennials, bushes and grasses that have evolved to support the butterflies, birds and bees we need. If we think of each yard in Bellport as a piece of a puzzle, we can help create corridors of nurturing habitat that will allow struggling species of butterflies, birds and bees to flourish again.

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How This Guide Is Organized

The following sections of this Guide provide detailed recommendations on how to:

A. Keep your lawn green and healthy without overfertilizing, and without using pesticides and herbicides that also pollute our bay.

B. Create habitat for butterflies, birds and bees, and further protect our bay by planting an oak tree or other tree native to Long Island in your yard.

C. Replace part of your lawn with native perennials, bushes or grasses that will nurture wildlife and further reduce stress on our bay.

To join the 1000 Yards campaign and get your free yard sign, you must do A and choose between B or C. If you can do A, B and C, all the better!

Free Yard Signs

Every Village resident who joins the 1000 Yards Campaign will be eligible to receive a free, handsome and sturdy yard sign (1 per yard).

By putting up these yard signs, we can show our pride in doing the right thing by our bay, and our pride in doing the right thing by our birds and precious pollinators. The yard signs are available at Bellport Village Hall.

4.

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BAY-FRIENDLY LAWN CARE

You can have a healthy green lawn that naturally stands up to disease and weeds without using chemicals that are blighting our bay.

Fertilizers: Give your lawn only the nutrients it needs.

U.S. homeowners use four times the amount of nitrogen, phosphorus, potassium (N-P-K) fertilizer per square foot on their lawns that American farmers use on their crops. Heavy rains and overwatering send these excess nutrients into our bay aboveground through stormwater runoff and belowground through the water table by leaching. This flood of nutrients feeds an explosion of algae. When these algae blooms die, the bacteria decomposing them consume the oxygen in the bay, suffocating marine life. Algae blooms also pose health risks to swimmers and pets in the form of skin irritation and gastrointestinal illnesses. All of our lawns in Bellport are close enough to the bay to contribute to this nutrient overload.

Algae blooms can wreak havoc on marine ecosystems and endanger the health of humans and pets.

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5.

Recommendations

If you've found that your lawn is yellow or limp, or has bare patches despite regular care, test your soil to see if your pH falls within the recommended range of 6.0 to 7.0. If your soil is too acidic (less than 6.0 pH), it can interfere with your lawn's ability to absorb nitrogen, leading you to overfertilize. Simple applications of lime to the soil will bring your lawn into balance.

Apply no more than 1 pound of actual nitrogen per 1,000 square feet of lawn each season. To calculate how many pounds of fertilizer to buy, divide 100 by the N in the N-P-K breakdown on the fertilizer package. So if N is 12, you will need 8.3 pounds of fertilizer to give you 1 pound of actual nitrogen per 1,000 square feet of lawn.

The N in the N-P-K breakdown should never be more than 12% and the P should always be 0%.

Using fertilizers with phosphorus (P) on mature lawns is now illegal in New York State.

About 50% to 70% of the nitrogen in your fertilizer should be water-insoluble (slow-release) nitrogen so it can be slowly absorbed by your lawn rather than sink rapidly into the groundwater. Fertilizing this way encourages healthy root systems. It also limits the excess nitrogen that migrates to the bay through groundwater or stormwater runoff.

Use LI Water's fertilizer page to find fertilizers that meet these criteria (www.liwater.org/fertilizers) LI Water is a coalition of nonprofit organizations, community groups and individuals dedicated to protecting our water.

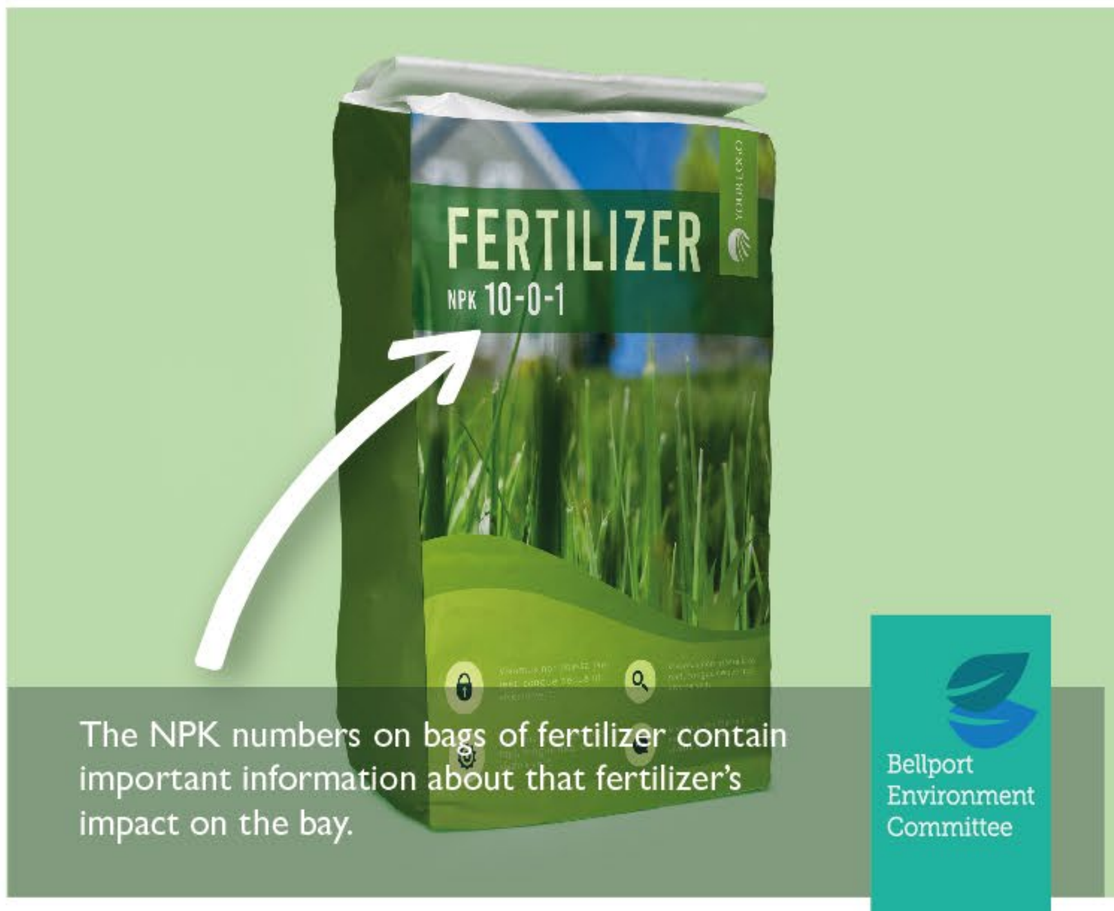
Additional Tips

- Try to purchase fertilizers that have a stamp certified by the Organic Materials Review Institute (OMRI).
- New York State law prohibits fertilizing within 20 feet of a body of water unless there is at least a 10-foot-wide buffer of grasses, shrubs and trees that can absorb excess nutrients.

Resources: Cornell Cooperative Extension Suffolk County tests soils for pH levels and conductivity (soluble salts). Please visit Cornell Cooperative Extension | Soil Testing Services (ccenassau.org) or call (631) 727-4126.

Pesticides: Break Bad Habits.

Soil naturally contains microbes, insects and earthworms that are essential to healthy lawns. These creatures maintain soil fertility by cycling nutrients, increasing aeration, deepening water infiltration and providing defenses against disease. When we apply chemical pesticides, we destroy these helpful creatures, forcing us to try to repair the damage by applying still more harmful chemicals.



The NPK numbers on bags of fertilizer contain important information about that fertilizer's impact on the bay.

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6.

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Many pesticides also pose neurological health risks to humans and animals. This exposure comes not only from our lawns, but also from the water of our bay. Heavy rains send these harmful chemicals cascading down our streets directly into the bay. They also seep into the bay through our groundwater.

No fewer than 117 pesticides have been detected in Long Island groundwater.

Recommendations

- Do not use pesticides of any kind on your lawn. These include herbicides, fungicides and insecticides. Weeds and disease are symptoms of an unhealthy lawn, not the cause.

- Adding fine compost will build healthy soil structure by adding organic matter, improving water retention and increasing aeration.

Thoughtful Lawn Care: Bay-friendly mowing, watering and seeding practices will keep your lawn healthy and also conserve valuable resources.

Mowing

Mowing your lawn below a height of 3" necessitates more watering, leads to the development of shallow, drought-vulnerable root systems and encourages weeds.

Recommendations

- Maintain your lawn at a height of 3" to 3.5" while never cutting off more than a third of the blades at any one time. Grass maintained at this height will shade out germinating weeds and encourage deeper, more resilient root systems.

- Leave the grass clippings on your lawn. When they decompose, they will provide your lawn with 30% of its nitrogen needs. A mulching lawn mower will chop blades of grass more finely, speeding up decomposition.

Additional Tips

- Keep your lawn mower blades sharp so they do not tear grass blades, exposing them to disease.

- The only time you should cut your lawn shorter than 3" is just before you seed.

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7.

Watering

Outdated irrigation practices and technologies waste up to 50% of the water we use on our lawns. At ground level, overwatering encourages fungal diseases and shallow, drought-vulnerable root systems. Belowground, excess water seeps into the water table and then migrates to the bay, carrying with it harmful chemicals from fertilizers, pesticides and herbicides.

Recommendations

Give your lawn a 1"-deep saturation once a week overnight from 12 am to 8 am. If we are experiencing a prolonged dry spell, give your lawn ½" to ¾" of water every 4 days. In between waterings, let your lawn dry out completely. This method will encourage your lawn to develop deep, drought-resistant root systems. The Suffolk County Water Authority now requires that homeowners schedule their watering on odd or even calendar days based on whether their street address number is odd or even. (Note that this does not require homeowners to water on all odd or even days; stick with the weekly or every 4 days schedule outlined above.)

Purchase a rain gauge to monitor rainfall and how much water your irrigation system is providing.

Additional Tips

Periodically check your irrigation system for hose leaks as well as broken or clogged sprinkler heads. One malfunctioning sprinkler head can waste up to 25,000 gallons over a season.

Replace or upgrade your clock-based irrigation system with smart WaterSense*-certified systems. These systems verify your watering needs against current weather conditions, soil moisture levels or both. Upgrading your irrigation system can save an average of 7,600 gallons a year. Note that Suffolk County Water Authority's Water Wise Credit Program now offers financial incentives for upgrading your irrigation system.

If you do not have an in-ground irrigation system, use your rain gauge to determine when and how much you need to supplement rainfall with your sprinklers.

*WaterSense is a partnership program of the U.S. Environmental Protection Agency.

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8.

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Smart Seeding

Planting the wrong grass for Bellport's soil and climate will lead you to overwater and overfertilize your lawn.

Recommendations

The best fit for Suffolk County lawns is a blend of tall and fine fescues. This blend requires less watering and fertilizing and provides grass seeds suitable for both sunny and shady areas.

Freezing your grass seed for 48 hours before spreading will speed up germination.

Additional Tips

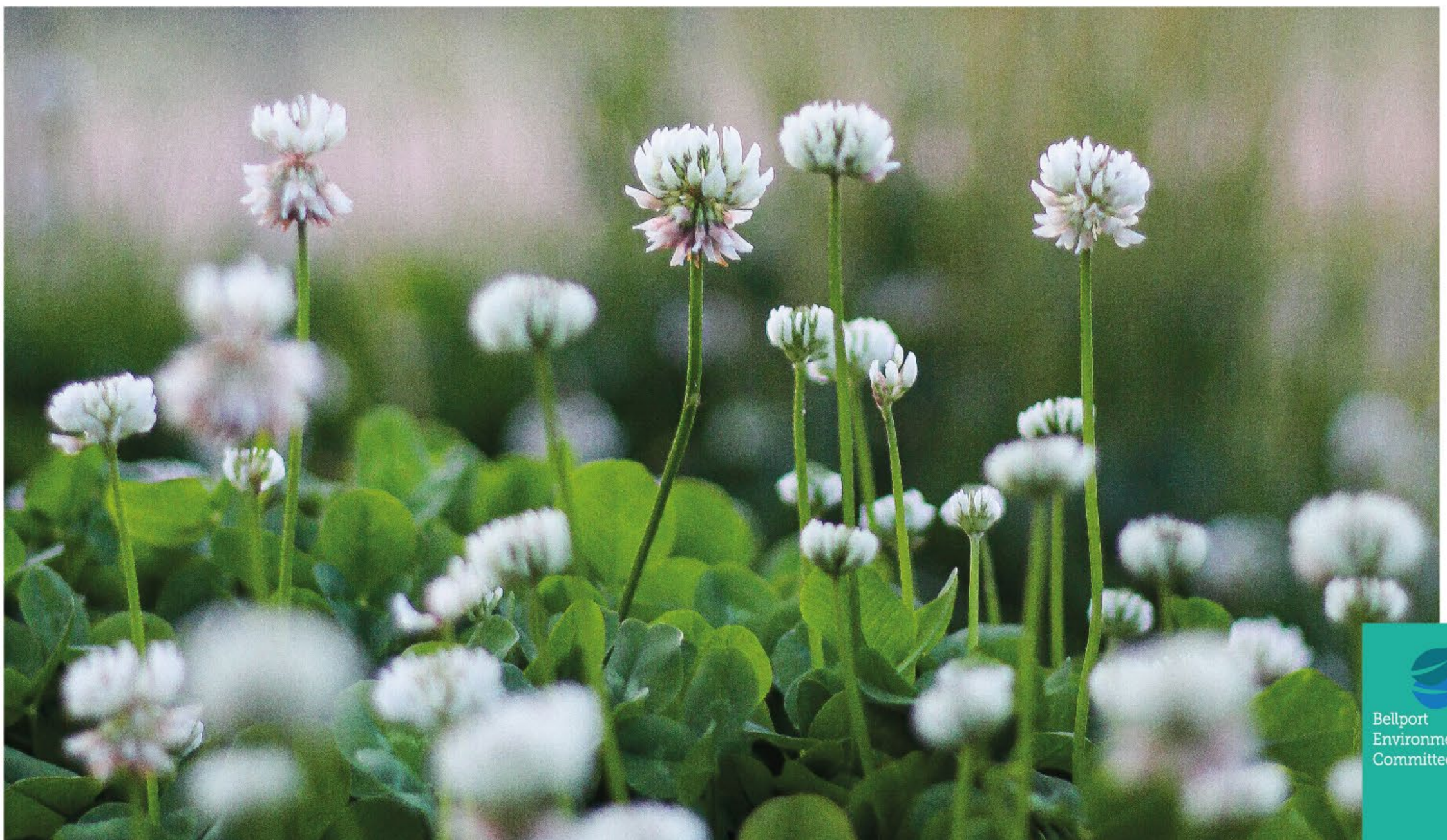
If you find there are certain areas of your lawn where you can never grow healthy grass because of complete shade or poor drainage, consider a native ground cover instead.

Final Thoughts

A healthy lawn maintained without harmful chemicals will likely contain clover, which is beneficial. By capturing nitrogen in the air and cycling it into the soil, clover fertilizes your lawn naturally.

While more pounds of bay-friendly fertilizers may be needed per application, you will end up fertilizing less often as the health of your soil recovers.

No lawn is a no-maintenance lawn. If you follow our recommended lawn practices, you can create a green and healthy low-maintenance lawn and help protect our bay.



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9.

INTRODUCING NATIVE PLANTS INTO YOUR YARD

A native plant is a plant that would have been found growing on Long Island naturally before European settlement.

A native plant is suited to the local growing conditions and can reduce the need for fertilizing, watering, mowing, pruning and other costly maintenance.

Unlike the typical turf grass found in lawns, native plants have coevolved with the birds, bees, butterflies and other small and large animals found here, and provide food and shelter for those animals at various stages of their life cycles.

By reducing or eliminating the need for fertilizing, watering and pesticides, native plants can lessen the nitrogen and pesticide-laden runoff that harms the bay.

Plants can be considered native to North America, the Northeast or even closer to home here on Long Island. Many nurseries and growers are now making Long Island–native plants available. Some organizations are even collecting seeds from wild lands here on Long Island and growing plants to sell from that very seed. We encourage you to use Long Island–native plants when possible. These plants are the best adapted to Bellport gardens, and your use of them will encourage even more nurseries to start to carry them.

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10.

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To be successful with native plants, you need to know your growing conditions. Is your yard all moist or all dry? Do you have a sprinkler system? Are there some areas that are not affected by your sprinklers? Is your yard flat or sloping? Are there areas that constantly stay wet and are shady? Are there hot, dry areas in the summer? Native plants can be found to tolerate all these conditions and turn a problem area into one that you will come to love.

Native plants like to be planted in groups. When planning an area to include natives, think about groups of 3 for larger plants like trees and shrubs and groups of 5 to 15 for perennials and grasses. Not only does massing natives look better and create a more beautiful mass of foliage and flowers, but growing in groups makes for a better underground root structure, helping to eliminate weeds and supporting strong plants aboveground.

> You do not need to completely redo your yard to begin to include natives into your home's landscape.

Start small and learn as you go. As you gain more knowledge and experience with natives, you will want to keep adding more and more.

Here are some easy ways to get natives into your landscape:

Pollinator gardens

The wildlife we are trying to attract to our yards needs food, water and shelter. Plants in a pollinator garden are important to bees, butterflies and other insects not only for the nectar their flowers provide, but for their leaves that are larval food sources for their caterpillars. Because milkweed is the larval food source for monarch caterpillars, we suggest that native milkweeds should be the backbone of any Bellport pollinator garden. Other important Long Island–native plants to include are asters and goldenrods as well as grasses such as purple love grass and switchgrass.

Monarch caterpillars depend on milkweed plants for their food. Milkweed is the only plant that they can eat. No milkweed, no monarch butterflies!

Hedges

Bellport landscapes tend to have hedges made up of a single nonnative species like privet. Instead, consider planting a hedge made up of a mix of native species. Hedges along property lines can provide privacy for you as well as food for you and the birds! They also provide cover and corridors for all types of wildlife. Hedges can be left natural and extend outward, beneficially reducing lawn area. Leaving hedges natural will also reduce costly and time-consuming pruning and shearing. Some native shrub species that would mix well in a Bellport hedge are highbush blueberry, arrowwood, bayberry, pitch pine, red cedar and American holly.

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Foundation plantings

The usually narrow planting around the foundation in front of many homes is known as a foundation planting. It is often planted with a single species of a plant such as the nonnative yew. This area can become a beautiful and more productive part of your yard by expanding it outward several feet. In front of your existing foundation planting, consider planting low-growing native perennials and grasses such as butterfly weed, mountain mint and little bluestem and add native shrubs such as inkberry, sweet fern and summersweet.

Rain gardens

Have a low damp spot in your yard or an area near a downspout near your home or garage? Consider converting this area to a rain garden that can collect runoff away from your home or driveway and become a productive part of your yard. Butterflies prefer moist soil, and you can make this trouble spot beautiful with cardinal flowers, Joe Pye weed, royal ferns and swamp rose mallow.

Butterfly weed has beautiful orange flowers that support butterflies and other pollinators.

One last word: Please do not dig up native plants in the wild. In most cases, they will not survive the transplant to your yard. Instead, buy natives from local businesses and nurseries. They will appreciate your business, and it will grow the supply for the future!

A few words about soil…

Soil is the foundation of all plant nutrition and water management. There are 4 main types of soil:

- Clay is dense and drains poorly, but has some nutrients.
- Sandy drains quickly and has few nutrients.
- Silt holds on to moisture longer and has more nutrients.
- Loam is a mixture of all 3 types and contains some organic matter.

A "feel test" of your soil is a good start to identify which types you have: Sand will feel gritty, clay will be sticky and silt will be smooth. Any of these types can be improved by using compost and working toward creating loam. Bellport soils tend to be sandy, but years of use may have altered the natural composition of the soil in your yard. Adding some organic matter — such as compost — will provide more nutrients and help with water retention and drainage.

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NATIVE TREES

One major contribution you can make is to plant a native tree in your yard. Native trees have several important functions beyond beautification, including:

• Providing year-round food and shelter for bees, butterflies and other insects as well as birds and mammals.

• Absorbing stormwater and filtering runoff before it enters the water table and the bay.

• Absorbing planet-warming carbon dioxide and releasing healthful oxygen into the atmosphere.

• Absorbing heat and keeping us cool in the summer.

Native trees play a special role in our local environment because they have evolved over time to support the life cycle of our local birds and insects. Most importantly, native trees provide habitat for the insects and caterpillars that are needed by baby birds in order to grow and thrive. Of all the trees that are native to Long Island, oaks support the most types of insects and caterpillars.

Before Bellport Village, there was likely a dense oak forest overlooking the bay. Thus oaks are well at home here, and we are suggesting 5 species of oaks native to the South Shore that will perform well in a variety of growing conditions. Some of these oaks are tall and some are small, but all of them can contribute to a vibrant community of hundreds of species of birds, butterflies and bees in your yard.

Eastern Red Cedar (left), Sassafras (center) and American holly (right)

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There are a number of other native trees that are right at home in Bellport and that also support local bees, butterflies and birds. Like oaks, they will contribute beauty, shade and shelter for you and your family. We are recommending 6 of them here. When selecting any native tree for your yard, try to give it the space it needs to grow without pruning so that its natural shape can be appreciated.

When planting a young tree, it may be necessary to protect the bark from deer or rabbits. We recommend a tree guard made of sturdy fencing, wire mesh or snow fence around the trunk. Consult a professional once the tree reaches 7 to 8 feet tall to determine if the guard is still necessary.

Additionally, trees grow best in groups of 3 or more. If you have room, please consider planting a small grove of trees in your yard. The environment will be enriched and so will your enjoyment of your native trees.

5 recommended oak species:

White oak (Quercus alba):

50 to 80 feet tall, up to 120 feet given the optimum growing conditions, 3 to 4 feet in diameter. Slow to medium growth rate, 12 to 15 feet over a 10- to 12-year period, grows very slowly after the first 20 to 30 years. White oaks can live for up to 400 years. Fall color varies from rich red to wine color. Can take full sun in dry to average soil.

Swamp white oak (Quercus bicolor):

60 to 70 feet tall, 2 to 3 feet in diameter. Leaves are dark, shiny green on top and silvery white on the undersides. Fall color is red to brown. Likes sun to partial sun and average to moist soil.

Scarlet oak (Quercus coccinea):

60 to 80 feet tall, 2 to 3 feet in diameter. Scarlet and russet red foliage in the fall. Likes full sun to partial sun and average to dry soil.

Bear oak or scrub oak (Quercus ilicifolia):

3 to 30 feet tall, 2 to 6 inches in diameter. This oak is sometimes considered a shrub due to its shorter stature. Slow-growing. Reddish-brown fall color. Bear oak needs full sun in dry to average soil.

Northern red oak (Quercus rubra):

60 to 75 feet tall, 2 to 3 feet in diameter. One of our most common local oaks. This oak grows fast, up to 2 feet per year. Leaves can be russet red to bright red in the fall. Likes full sun and grows in dry to average to moist soil.

14.

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6 other kinds of native trees (in addition to oaks) that will do well in Bellport yards:

Red maple (Acer rubrum):

40 to 60 feet tall, with rounded full crown. Reddish stems and samaras in spring, orangish-red leaves in fall. Consider this tree's shallow root system when planting near driveways or sidewalks. Prefers sun to part sun and average to moist soil.

American holly (Ilex opaca):

25 to 60 feet tall. Dense green evergreen tree; female specimens covered in red berries attracting flocks of migrating robins in late winter. Thrives in sun, part sun or partial shade and average soil.

Eastern red cedar (Juniperus virginiana):

Up to 50 feet tall, columnar to wide growth. Bright green to gold to silvery-gray evergreen foliage. Waxy blue seed cones are valuable food for songbirds. Excellent hedge plant. Prefers full sun and average to dry soil.

Tupelo (Nyssa sylvatica):

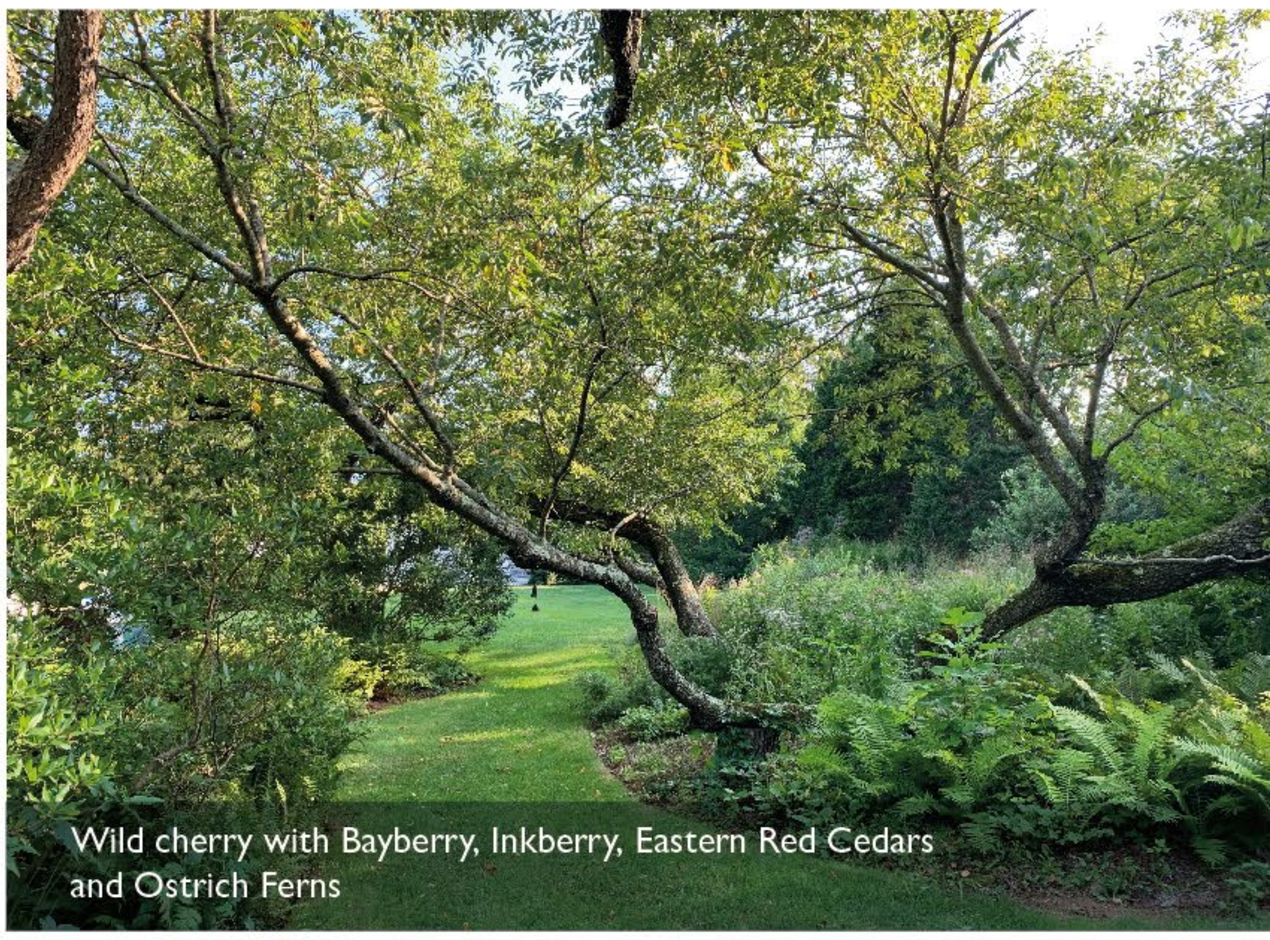
30 to 50 feet tall. Known for its distinctive horizontal branching pattern. Inconspicuous green flowers attract bees and pollinators; fall foliage is crimson red. Drought and heat tolerant, moderately salt tolerant. Sun to part sun, dry, average to moist soil.

Wild black cherry (Prunus serotina):

50 to 80 feet tall, with narrow to rounded crown. Lovely white flowers in spring, purple fruit for birds in summer and yellow fall color. Sun, part sun to partial shade, tolerates a wide range of soils, dry to average to moist.

Sassafras (Sassafras albidum):

20 to 50 feet tall with irregular crown. Most well-known for having leaves with 3 shapes: oval, mitten and tri-lobed. Fall color ranges from yellow to orange to red. May spread by underground runners to create a small grove. Although no longer generally regarded as safe, the roots were once used to make root beer. Sun to part sun, dry to average well-drained soil.



Wild cherry with Bayberry, Inkberry, Eastern Red Cedars and Ostrich Ferns

Eastern Red Cedar seed cones

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RESOURCES

There are a number of excellent resources to support the suggestions in this booklet. Many of the following books are available at the South Country Library or can be obtained through interlibrary loan. There are also some valuable websites you can review from the comfort of your own home.

Books:

- Blumer, Karen. 1991. Landscaping with Long Island Natives: A Source Book. Brookhaven, New York: Growing Wild Press.
- Leopold, Donald J. 2005. Native Plants of the Northeast: A Guide for Gardening & Conservation. Portland, Oregon: Timber Press.
- Lorimer, Uli. 2022. The Northeast Native Plant Primer. 235 Plants for an Earth-Friendly Garden. Portland, Oregon: Timber Press.
- Mizejewski, David. 2019 Attracting Birds, Butterflies & Other Backyard Wildlife, 2nd edition. National Wildlife Federation.
- Newcomb, Lawrence. 1989. Newcomb's Wildflower Guide. New York: Little, Brown & Company.
- Tallamy, Douglas W. 2009. Bringing Nature Home. How You Can Sustain Wildlife with Native Plants. Portland, Oregon: Timber Press.
- Tallamy, Douglas W. 2020. Nature's Best Hope: A New Approach to Conservation That Starts in Your Yard. Portland, Oregon: Timber Press.
- Tallamy, Douglas W. 2021 The Nature of Oaks: The Rich Ecology of Our Most Essential Native Trees. Portland, Oregon: Timber Press.

Webpages:

- missouribotanicalgarden.org
- nrcs.usda.gov
- wildflower.org
- homegrownnationalpark.org
- fs.usda.gov/wildflowers/pollinators/gardening.shtml
- extension.psu.edu/hedgerows-for-the-home-garden
- epa.gov/soakuptherain/soak-rain-rain-gardens
- friendsofbellportbay.org
- savethegreatsouthbay.org
- rewildlongisland.org/

16.

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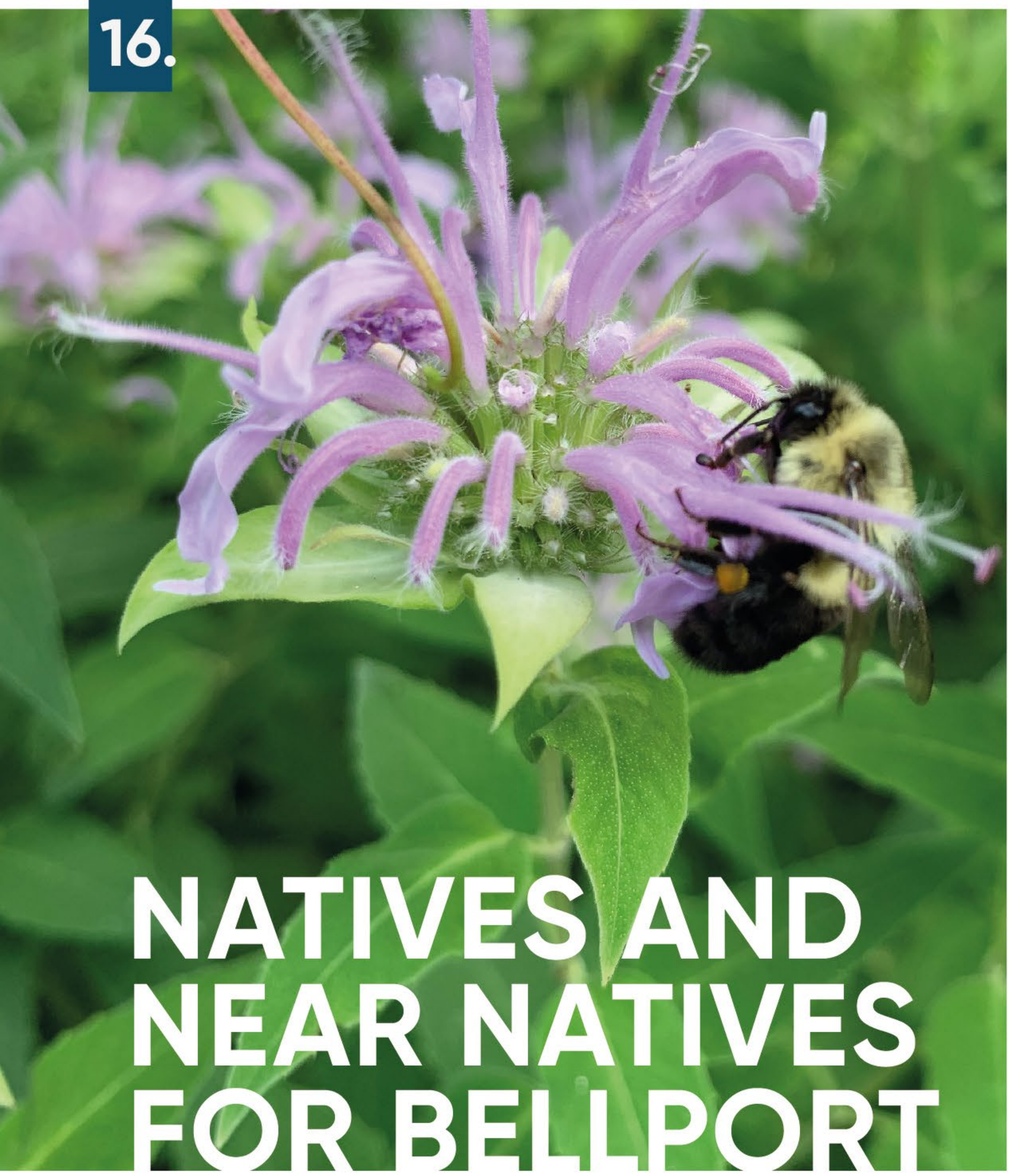

NATIVES AND NEAR NATIVES FOR BELLPORT LANDSCAPES

* Denotes Long Island native plant; all others native to eastern North America

KEY

Height

Light

S - Full sun
PS - Part Sun 5-10 hours of sun
PSH - Part Shade less than 5 hours of sun
SH - Less than one hour of sun

Moisture

D - Dry
A - Average
M - Moist

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Common Name Scientific Name		Height	Light	Moisture
TREES				
Red maple*	Acer rubrum	40-60 ft.	S/PS	A/M
Sugar maple	Acer saccharum	60-80 ft.	S/PS	A
Sweet birch*	Betula lenta	70 ft.	S/PS/PSH	A
River birch	Betula nigra	30-50 ft.	PSH	M
Common hackberry*	Celtis occidentalis	30-70 ft.	S/PS	A/M
American witch hazel*	Hamamelis virginiana	10-20 ft.	S/PS/PSH	D/A
American holly*	Ilex opaca	40-60 ft.	S//PS/PSH	A
Eastern red cedar*	Juniperus virginiana	50 ft.	S/PS	D/A
Sweetgum*	Liquidambar styraciflua	60-100 ft.	S/PS	A/M
Sweetbay magnolia*	Magnolia virginiana	20-30 ft.	S/PS/PSH	A/M
Tupelo*	Nyssa sylvatica	30-50 ft.	S/PS	D/A/M
Pitch pine*	Pinus rigida	10-70 ft.	S	D/A
Eastern white pine	Pinus strobus	80 ft.	S/PS	A/M
Wild black cherry*	Prunus serotina	60 ft.	S/PS/PSH	D/A/M
White oak*	Quercus alba	120 ft.	S/PS	D/A
Swamp white oak*	Quercus bicolor	60-70 ft.	S/PS	A/M
Scarlet oak*	Quercus coccinea	60-80 ft.	S/PS	D/A
Scrub or bear oak*	Quercus ilicifolia	15-20 ft.	S	D/A
Red oak*	Quercus rubra	90-100 ft.	S/PS	D/A/M
Sassafras*	Sassafras albidum	20-50 ft.	S/PS	D/A
Arborvitae	Thuja occidentalis	40-60 ft.	S/PS/PSH	A/M

SHRUBS		Height	Light	Moisture
Shadbush*	Amelanchier canadensis	15-20 ft.	S/PS/PSH	M
Red chokeberry*	Aronia arbutifolia	6-10 ft.	S/PS	D/A/M
Groundsel bush*	Baccharis halimifolia to	15 ft.	S/PS	A/M
New Jersey Tea*	Ceanothus americanus	3-5 ft.	S/PS/PSH	D/A/M
Buttonbush*	Cephalanthus occidentalis	6-10 ft	PSH/SH	M
Summersweet*	Clethra alnifolia	8-10 ft.	S/PS	A/M
Sweetfern*	Comptonia peregrina	3-4 ft.	S/PS	D/A/M
Wintergreen*	Gaultheria procumbens	6 in.	PSH/SH	S/A/M
Oakleaf hydrangea	Hydrangea quercifolia	3-12 ft.	PSH/SH	A/M
Inkberry*	Ilex glabra to	15 ft.	S/PS/PSH	D/A/M
Winterberry*	Ilex verticillata	6-10 ft.	S/PS/PSH	A/M
Sweetspire	Itea virginica	3-6 ft.	PS/PSH	A/M
Creeping juniper	Juniperus horizontalis	1 ft.	S/PS/PSH	D

18.

1000YARDS CAMPAIGN

Common Name Scientific Name	Height	Light	Moisture
Mountain laurel* Kalmia latifolia	6-10 ft.	S/PS/PSH	D/A/M
Spicebush* Lindera benzoin	6-12 ft.	PS/PSH	A/M
Bayberry* Morella pensylvanica	8-10 ft.	S/PS	D/A/M
Beach plum* Prunus maritima	15 ft.	S	D/A
Swamp azalea* Rhododendron viscosum	8-10 ft.	PS/PSH	M
Winged sumac* Rhus copalinum	10 ft.	S/PS	D/A
Smooth sumac* Rhus glabra	15 ft.	S/PS	D/A
Pussy willow* Salix discolor	15-20 ft.	S/PS	M
Elderberry* Sambucus canadensis	12-15 ft.	S/PS/PSH	A/M
Rosy meadowsweet* Spirea tomentosa	2-4 ft.	S	A/M
Lowbush blueberry* Vaccinium angustifolium	3 ft.	S/PS/PSH	D/A
Highbush blueberry* Vaccinium corymbosum	6-8 ft.	S/PS	A/M
Arrowwood* Viburnum dentatum	8-10 ft.	S/PS/PSH	A/M

GRASSES	Height	Light	Moisture
Big bluestem* Andropogon gerardii	5-8 ft.	S/PS	D/A
Purple lovegrass* Eragrostis spectabilis	2 ft.	S	D
Switchgrass* Panicum virgatum	4-5 ft.	S/PS	D/A
Little bluestem* Schizachyrium scoparium	3-4 ft.	S/PS/PSH	D/A
Indiangrass* Sorghastrum nutans	3-5 ft.	S	D/A

WILDFLOWERS	Height	Light	Moisture
Swamp milkweed* Asclepias incarnata	4-5 ft.	S/PS/PSH	A/M
Common milkweed* Asclepias syriaca	3-5 ft.	S/PS	D/A
Butterfly weed* Asclepias tuberosa	2-3 ft.	S/PS	D/A
Wild blue indigo Baptisia australis	2-5 ft.	S/PS	A
False indigo* Baptisia tinctoria	3 ft.	S/PS	D
Turtlehead* Chelone glabra	3-4 ft.	PS/PSH	M
Maryland goldenaster* Chrysopsis mariana	1-1.5 ft.	S	D
Pink thread leaf coreopsis Coreopsis rosea	1 ft.	S	A/M
Hyssop leaved thoroughwort* Eupatorium hyssopifolium	2-3 ft.	S/PS	D
Boneset* Eupatorium perfoliatum	3-5 ft.	S/PS	M
White wood aster* Eurybia divaricata	2-3 ft.	S/PS/PSH	D
Joe Pye weed* Eutrochium fistulosum	10 ft.	S/PS	M
Swamp rose mallow* Hibiscus moscheutos	4-6 ft.	S/PS	M
Stiff aster* Ionactis linariifolia	2 ft.	S/PS	D

1000YARDS CAMPAIGN

19.

Common Name / Scientific Name	Height	Light	Moisture
Blue flag iris* Iris versicolor	4-5 ft.	S/PS	M
Cardinal flower* Lobelia cardinalis	3-4 ft.	PS/PSH	M
Sundial Lupine* Lupinus perrenis	2-3 ft.	S/PS	D
Wild bergamot* Monarda fistulosa	4-5 ft.	S/PS	A/D
Spotted bee balm* Monarda punctata	3-4 ft.	S/PS	D
Evening primrose* Oenothera biennis	2-5 ft.	S	D
Slender mountain mint* Pycnanthemum tenuifolium	3 ft.	S/PS	A/D
Early goldenrod* Solidago juncea	3-4 ft.	S/PS	A/D
Sweet goldenrod* Solidago odora	3-4 ft.	S/PS	A/D
Seaside goldenrod* Solidago sempervirens	2-6 ft.	S	A
Smooth blue aster* Symphyotrichum laeve	3-4 ft.	S/PS	D/A
New England aster* Symphyotrichum novae-angliae	3-6 ft.	F/PS	A/M
New York aster Symphyotrichum novl-belgii	3-5 ft.	S/PS	M
Little white aster* Symphyotrichum pilosum	5 ft.	S/PS	M
Blue vervain* Verbena hastata	2-6 ft.	S/PS	M

VINES	Height	Light	Moisture
Virginia creeper* Parthenocissus quinquefolia	30 ft.	S/PS/PSH	D/A

FERNS	Height	Light	Moisture
Lady fern* Athyrium filix-femina	2-5 ft.	PSH/SH	M
Hay scented fern* Dennstaedtia punctilobula	3 ft.	PS/PSH	D/A
Marginal shield fern* Dryopteris marginalis	2-3-ft.	PS/PSH	A
Ostrich fern Matteuccia struthiopteris	3-4 ft.	PS/PSH	M
Sensitive fern* Onoclea sensibilis	1-2 ft.	S/PS/PSH	A/M
Royal fern* Osmunda regalis	3-5 ft.	PS/PSH	M
Christmas fern* Polystichum acrostichoides	1-1.5 ft.	PS-PSH	A

Bellport Environment Committee

NOTES

NOTES

KEY FINDINGS

Bay-Friendly Lawn Care

- Use bay-friendly fertilizer: The nitrogen (N) in the NPK breakdown on the front of any bag of fertilizer should always be below 12%. The potassium (P) should be 0%. Pages 4-5.

- Do not use pesticides of any kind on your lawn. These include herbicides, fungicides and insecticides. Weeds and disease are symptoms of an unhealthy lawn, not the cause. Pages 5-6.

- Mowing your lawn below a height of 3" necessitates more watering. Maintain your lawn at a height of 3" to 3.5" while never cutting off more than a third of the blades at any one time. Grass maintained at this height will shade out germinating weeds and encourage deeper, more resilient root systems. Page 6.

- Overwatering encourages fungal diseases and shallow, drought-vulnerable root systems. Tips on watering can be found on page 7.

- Planting the wrong grass for Bellport's soil and climate will lead you to overwater and overfertilize your lawn. Learn more about tall and fine fescues on page 8 to ensure your lawn is beautiful and adapted to this area, negating the need for excessive inputs to maintain the appearance.

Recreating Habitat in Our Yards Using Native Plants

- Native plants have coevolved with the birds, bees, butterflies and animals to provide year-round food and shelter at various stages of their life cycles. Learn more about the importance of native plants on pages 9-10.

- Your soil is the key to planting success. Knowing your soil type and building its structure, fertility and water retention will support your plants. Page 11.

- You do not need to completely redo your yard to begin to include natives into your home's landscape. Start small and learn as you go. Read more about native plants and how to incorporate them into a beautiful garden on pages 10-11.

- We encourage you to use Long Island–native plants when possible. These plants are best adapted to Bellport gardens, and your use of them will encourage even more nurseries to start to carry them. A list of native perennials, trees, shrubs, grasses and more can be found on pages 16-19.

Native Trees — Beautification & So Much More

- Native trees play a special role because they have coevolved over time to support the life cycle of our local birds and insects, including caterpillars, which are an essential source of food for baby birds. Learn more on page 12.

- Trees also absorb stormwater and filter runoff before it enters the water table and the bay, absorb planet-warming carbon dioxide and release oxygen into the atmosphere, and absorb heat and keep us cool in the summer. Page 12.

- This booklet provides recommendations for a total of 11 native trees of various sizes and landscaping functionality that can be planted in your yard. See recommendations on pages 13-14.