



Thriving Habitats – Helping You Create a Healthier Landscape

*Presented for the Six Ponds Improvement Association
by Love Albrecht Howard and Susanne Lucas
June 29, 2025*

A special THANK YOU to the Wildlands Trust

WE WANT TO HELP YOU

Obtain a healthy balance on the property surrounding your home

Learn successful plant cultivation techniques

Appreciate why native plants are important

Understand why invasive plants pose problems and how to eliminate them

Explore why healthy landscaping pond-side is particularly important; protecting our watersheds and ponds from potential contaminants is essential in maintaining the optimal vitality of our neighborhood environment.

Work responsibly with our fragile pond-front properties with an understanding of the rules set by the Town of Plymouth's Conservation Commission following the mandate of the 1962 Wetlands Protection Act – we need to protect our water resources

Realize that spraying for mosquitoes and ticks is harmful to all

Questions?

**Please write them down for us to
answer
at the end of the presentation**



Our neighborhood

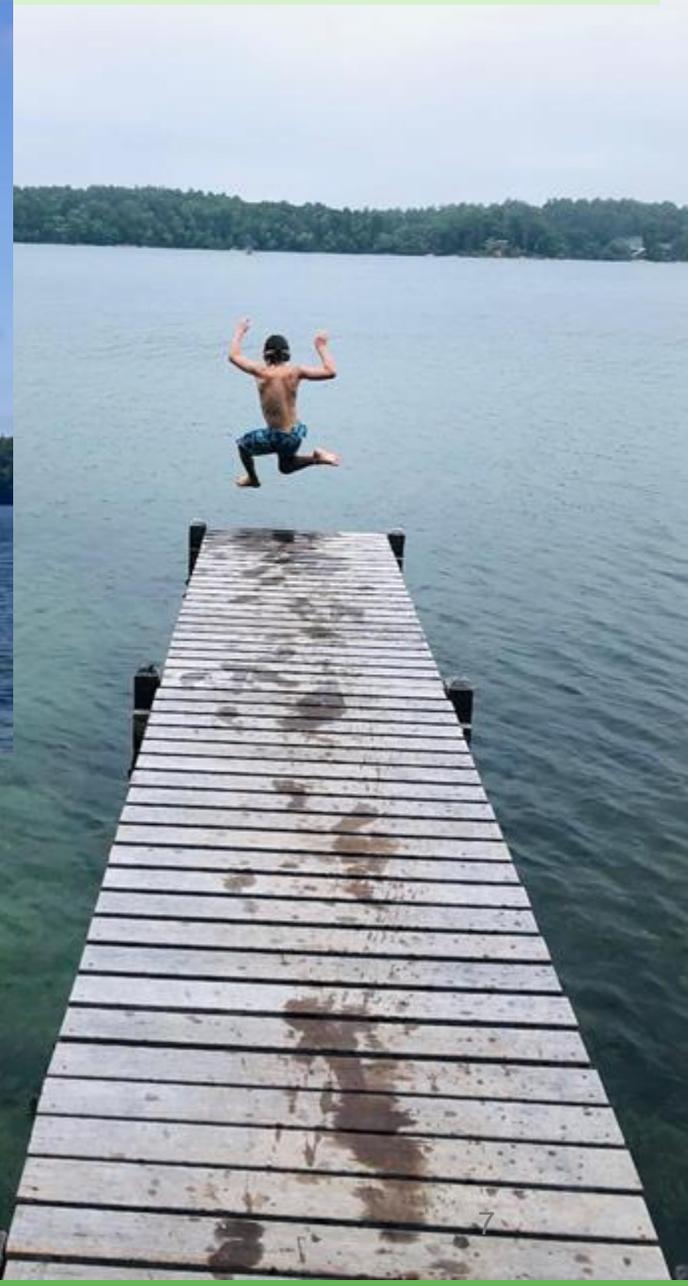


Our neighborhood

Our neighborhood



Our neighborhood





Massasoit National Wildlife Refuge

The Pleehills



SIX PONDS
PLYMOUTH, MASS
SIXPONDS.ORG

Stand
Fore

Ellisville Harbor
Park



Our neighborhood



Why care?

- Our Atlantic Coastal Pine Barrens ecoregion is particularly fragile
- Rare temperate coniferous forest distinguished by:
 - Rare species
 - Unique topographical features (coastal plain ponds, frost pockets)
 - Sandy, nutrient-poor, often acidic soil



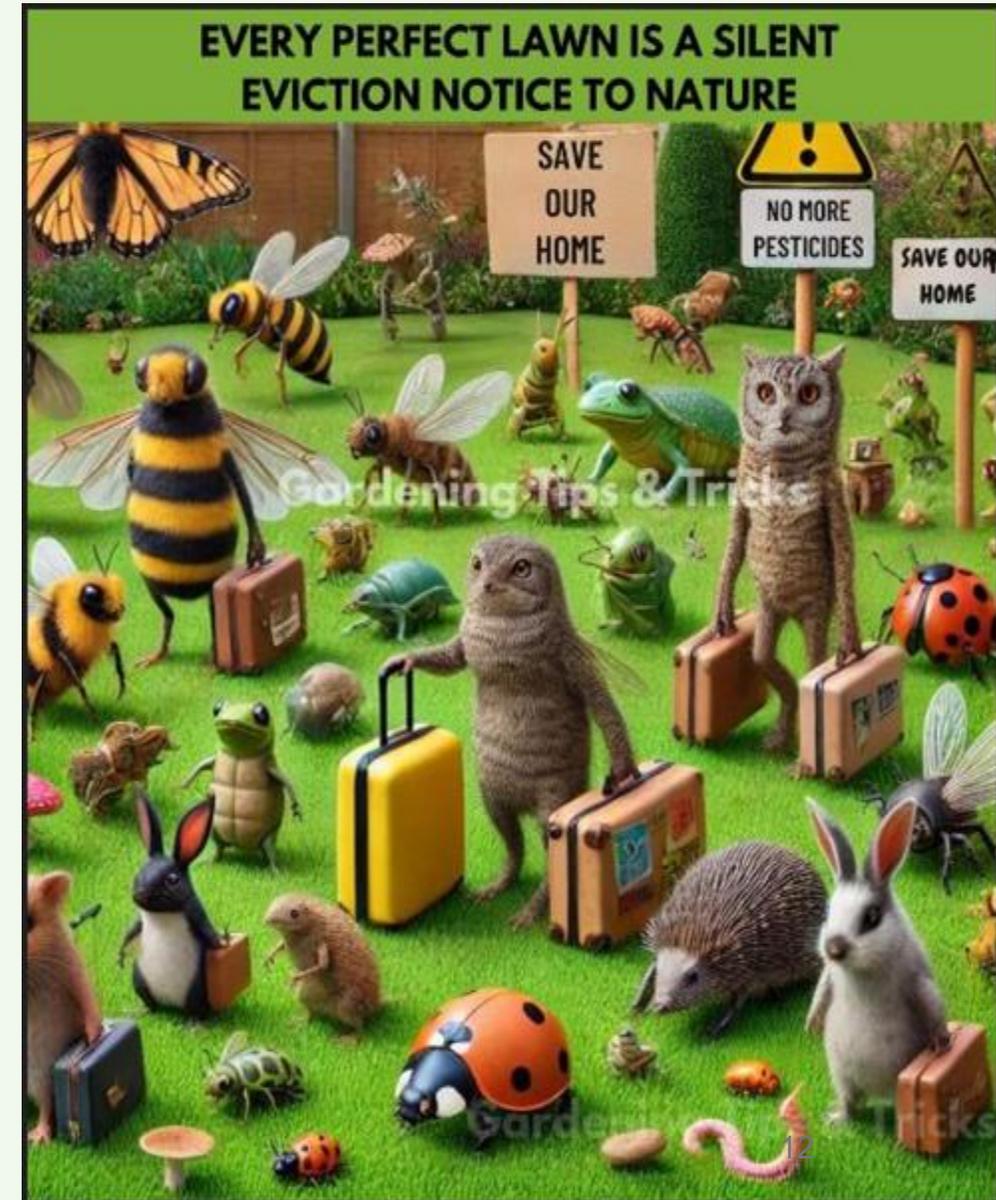
Why does GREENING our properties matter?

How can we make changes to suit ~us~ without destroying lots of other stuff? Do it better!

- > Soils – if your soils are good, you can grow almost anything, almost effortlessly = **AMEND YOUR SOIL**
- > Match the plant to place – don't force it
- > Choose at least 50% native plants – WHY?
- > Stop using toxins that poison our water, actively kill beneficial wildlife, and ultimately harm us

CHEMICALS – Just say NO!

- Most of the insects in our yards are BENEFICIAL!!!
- Healthy, properly mown & grown lawns need almost no pest or weed controls
- Most lawns are lifeless deserts
- Some lawns and gardens are literally addicted to chemical inputs
- Knowing you, your children, your pets can go outside and roll on the lawn and have no worries about neurotoxins and carcinogens? **PRICELESS!**



What is a native plant?

- In the U.S. - an indigenous plant present before European colonization
- Can native plants be invasive? No, but they can be very aggressive!



Benefits of native plants:

- Optimally suited to local climate <evolution>
- Naturally conserve water, protect soil & help arrest erosion
- Regenerate naturally & recover quickly if disturbed, so support climate resiliency
- Eliminate need for pesticides, herbicides, fungicides, & fertilizers (lean soils are best)
- Co-evolution with other native species = coinciding phenological events
- Support wildlife (!!!) providing food and habitat
- Goal: allow natives to comprise 50% or more of your softscape

Native vs. Exotic/Alien

- Native plants here at colonization – 1620
- Exotic/alien – anything else brought here



Swamp Red Maple



Norway Maple

What is an invasive plant?

- Thugs from another locale that don't belong here
- All invasives are weeds, but not all weeds are invasive
- Arrived after colonization (1620)
- Tolerate extreme conditions & exposures
- Grow in a variety of soils from lean sand to rich loam
- Ruderal species
- Capable of aggressive (invasive!) replication
- Cause harm to the environment and/or to \$ crops

Other names for invasive plants:

Alien invasive plants

Non-endemic invasive plants

Non-native invasive plants

Exotic invasive plants



Frangula alnus – Glossy Buckthorn

Small tree with shiny leaves and white dots (lenticels) on bark.

Fruits are a laxative with negative food value for wildlife – and the fruits are PROLIFIC. Buckthorn grows everywhere: fields, woods, wetlands and roadsides. It can form dense thickets.

Remove the entire plant (roots, too!) because regrowth is harder to eradicate. Easy to pull when young.



***Celastrus orbiculatus* - Oriental Bittersweet**

Aggressive climbing vine can reach 60', covering and choking everything in its path

Seeds and orange rootlets build in soil and can remain dormant for years

Roots sprout prolifically if disturbed

Seeds are spread by birds and humans – do NOT use these seedheads for holiday decoration!

Young vines pull easily

Roots are bright orange



NATIVE but AGGRESSIVE FRIEND or FOE?
Smilax / Cat Briar / Greenbriar



NATIVE and AGGRESSIVE .. FRIEND or FOE?
Virginia Creeper / *Parthenocissus*



NATIVE and AGGRESSIVE FRIEND or FOE? Poison Ivy / *Toxicodendron*



©Randy Tindal, Nadia's Backyard

Steve Schmitt, Florida

How did invasives get here?

- **Brought here by colonists & immigrants**
 - Useful plants – food, medicine, forage, beauty
- **Introduced intentionally to solve a problem**
 - Erosion control, forage, pest control, ornamental value
- **Hitched a ride**
 - People, birds, wind, cargo & shipments, packing materials, ballast water, firewood, contaminated soil, shoe tread
 - Floods & landslides can move invasives long distances
 - Climate crisis is accelerating dispersal and movement north as we warm
 - Smuggled – Red Lily Beetle
- **Released into the wild (humans doing dumb stuff)**
 - Intentional Release – Spongy Moth, Canada Geese

Why are they “bad”?

- Vigorously colonize & outcompete natives
- Invade ecosystems, push out indigenous species
- Alter habitat structure, can impact water quality
- Have different phenology
- Reduce biodiversity
- Economic costs

**Our state has a list of
“banned” plants**

**165 plant species
are currently
banned due to
INVASIVENESS!**



www.mass.gov/info-details/massachusetts-prohibited-plant-list

Weeded Out! Now What?

Cover the soil after disturbance!

- Most weed seeds require light to germinate
- Mulch with organic materials free of seeds
- Watch the area and pluck out any undesirable sprouts quickly
- After a year of watching & weeding, replant and mulch
- Note! Weed block is horrible stuff – nasty plastic in the landscape, cuts oxygen exchange and water to the soil, and doesn't prevent weeds. Just say NO!

If you're not sure – ASK! Crowd-source! Post question and pics on South Shore Gardening or MA WildOnes (native plants).



Nipplewort / *Lapsana communis*



EXOTIC – NOT NATIVE – BUT VERY SUITABLE FOR OUR YARDS



**Pollinator Gardens:
Trendy and vital!**

"People tend to focus on flowers,
but if you want a garden that
helps insects, you need to consider
their entire life cycle, including where
insects lay their eggs and shelter
through the winter."





TOWN OF
PLYMOUTH
MASSACHUSETTS



CONSERVATION COMMISSION

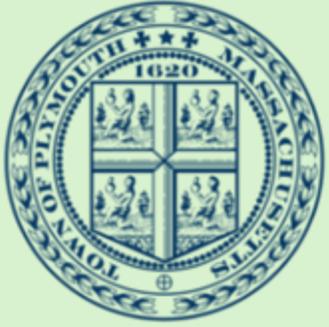
= 200 Ft from any river

= 100 Ft from any pond

BUFFER ZONE RESOURCE AREA

RULES AND REGULATIONS
FOR
PLYMOUTH WETLANDS PROTECTION
BYLAW
(Chapter 196 of the Town of Plymouth Bylaws)

Contact Phone [508-322-3322](tel:508-322-3322)



TOWN OF
PLYMOUTH
MASSACHUSETTS

CONSERVATION COMMISSION

= 200 Ft from any river

= 100 Ft from any pond

BUFFER ZONE RESOURCE AREA



<https://www.plymouth-ma.gov/688/Wetlands-Regulations-Bylaws>

APPENDIX B: DESIGNING AND PRESERVING VEGETATED BUFFERS PLANT LISTS AND ADDITIONAL RESOURCES

PLANT LIST LEGEND

SYMBOL	CHARACTERISTIC	SYMBOL	CHARACTERISTIC
	Keystone Species		Fall Leaf Color
CC	Native to Cape Cod		Evergreen (or mostly evergreen)
MA	Native to Massachusetts		Samaras (Winged Seeds)
NE	Native to the Northeastern US		Berry or Fruit Color
x 	Tolerates full sun (6+ hrs)		Produces Nuts
x 	Tolerates part shade (3-6 hrs sun)		Produces Catkins
x 	Tolerates full shade (< 3 hrs sun)		Produces Pinecones
x 	Tolerates dry soils or drought		Attracts and hosts beneficial insects including caterpillars, ladybugs, and more
x 	Tolerates average or moist soils		Supports pollinators including native bees, butterflies and moths
x 	Tolerates wet soils		Attracts birds
 Bloom	Flower Color and Bloom Time		Attracts hummingbirds
Warm season	Grasses that emerge and grow in warmer parts of the season (summer)		Potential lawn alternative plant
Cool season	Grasses that emerge and grow in cooler parts of the season (spring/fall)		Resists deer browse*
			Resists rabbit browse*

*Browse resistant does not mean completely deer or rabbit proof. While some plants are toxic to deer and rabbits, some are unpalatable due to texture, flavor, or scent.

PLANTS NATIVE TO CAPE COD AND THE NORTHEASTERN US

For vegetated buffers near freshwater ponds, where the preservation of functioning wetland systems (including wildlife habitat) is the main objective, priority should be placed on plants native to Cape Cod. This means the plants have evolved naturally over time alongside other plants and wildlife species in our area, and they play a critical role within our local ecosystems including freshwater wetlands and ponds.

However, there are also plants that are native to Massachusetts and the Northeastern United States that can provide additional wildlife value and other functional and aesthetic benefits, and some of those plants are listed in this appendix, though they are noted as plants native to Massachusetts (MA) or the Northeast (NE) rather than Cape Cod (CC).

Always check with your local conservation commission before planting anything in a freshwater pond buffer zone, even if the plants are on this list, as different towns have different conservation bylaws and definitions. Some jurisdictions may allow plants native to the northeast to be included in certain places such as foundation plantings or areas that are not immediately adjacent to the resource area.

Woody Shrub / Groundcovers													
Native	Key	Scientific Name	Common Name	Height	Width	Sun	Part	Shade	Dry	Avg	Wet	Bloom	Seasonal Interest / Wildlife Benefits
CC		<i>Arctostaphylos uva-ursi</i>	Bearberry, Kinnikinnick	6"	36-72"	x	x		x	x		late spring	     
CC		<i>Gaultheria procumbens</i>	Wintergreen	1-4"	6-12"		x	x	x	x		early summer	    
CC		<i>Vaccinium angustifolium</i>	Lowbush blueberry	6-24"	24"	x	x			x		late spring	    
CC		<i>Vaccinium macrocarpon</i>	Large cranberry	4-6"	12-72"	x			x	x		late spring	    
CC		<i>Vaccinium pallidum</i>	Hillside blueberry	12-24"	24-36"	x	x		x	x		late spring	    



Cranberry



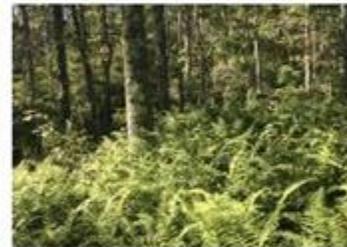
Bearberry



Lowbush blueberry



Sensitive fern



Hayscented fern



Cinnamon fern



Christmas fern



Fern, Starflower, Canada mayflower



Switchgrass



Tufted / wavy hairgrass



Little bluestem



Purple lovegrass



Wood sedge

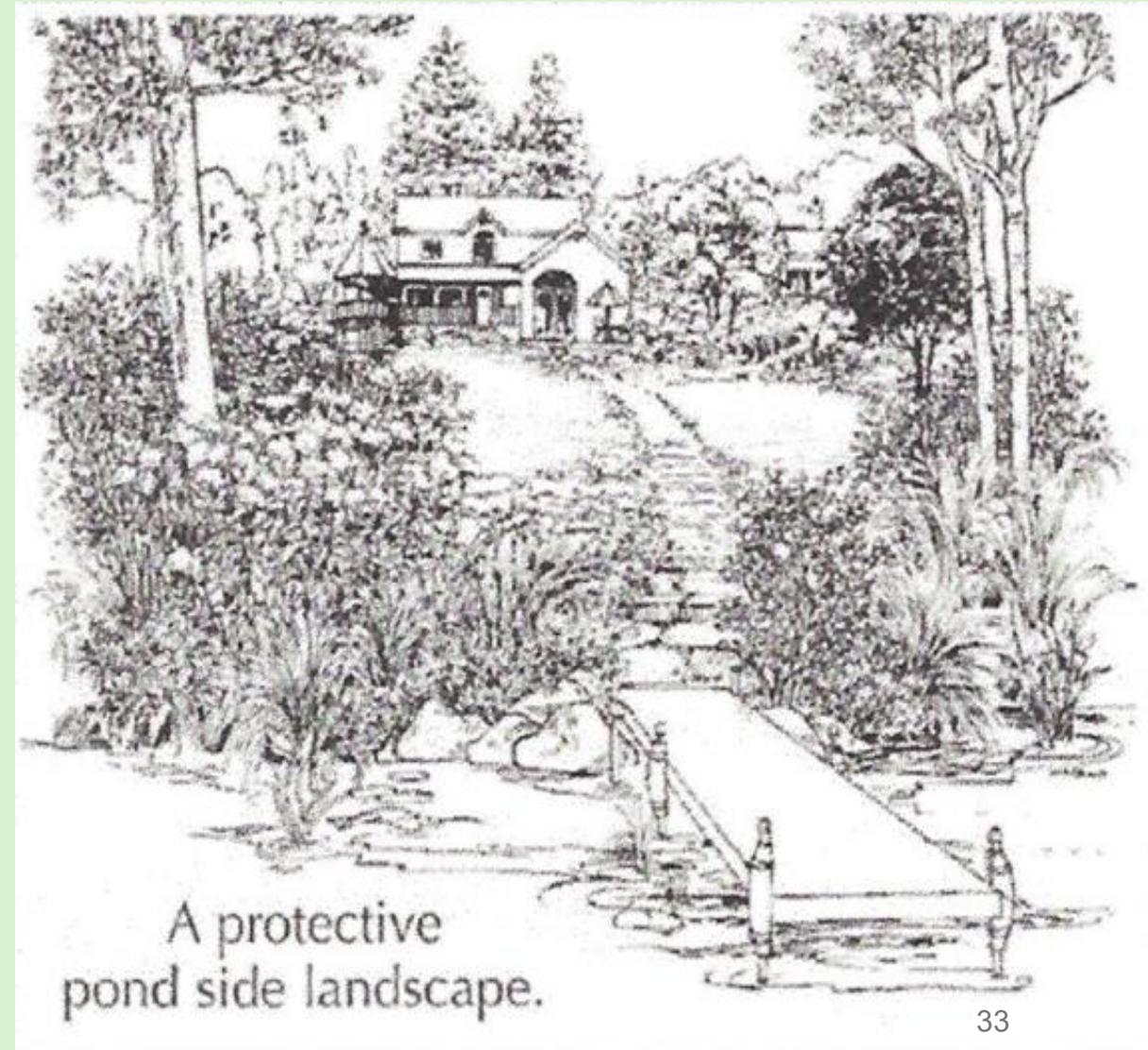
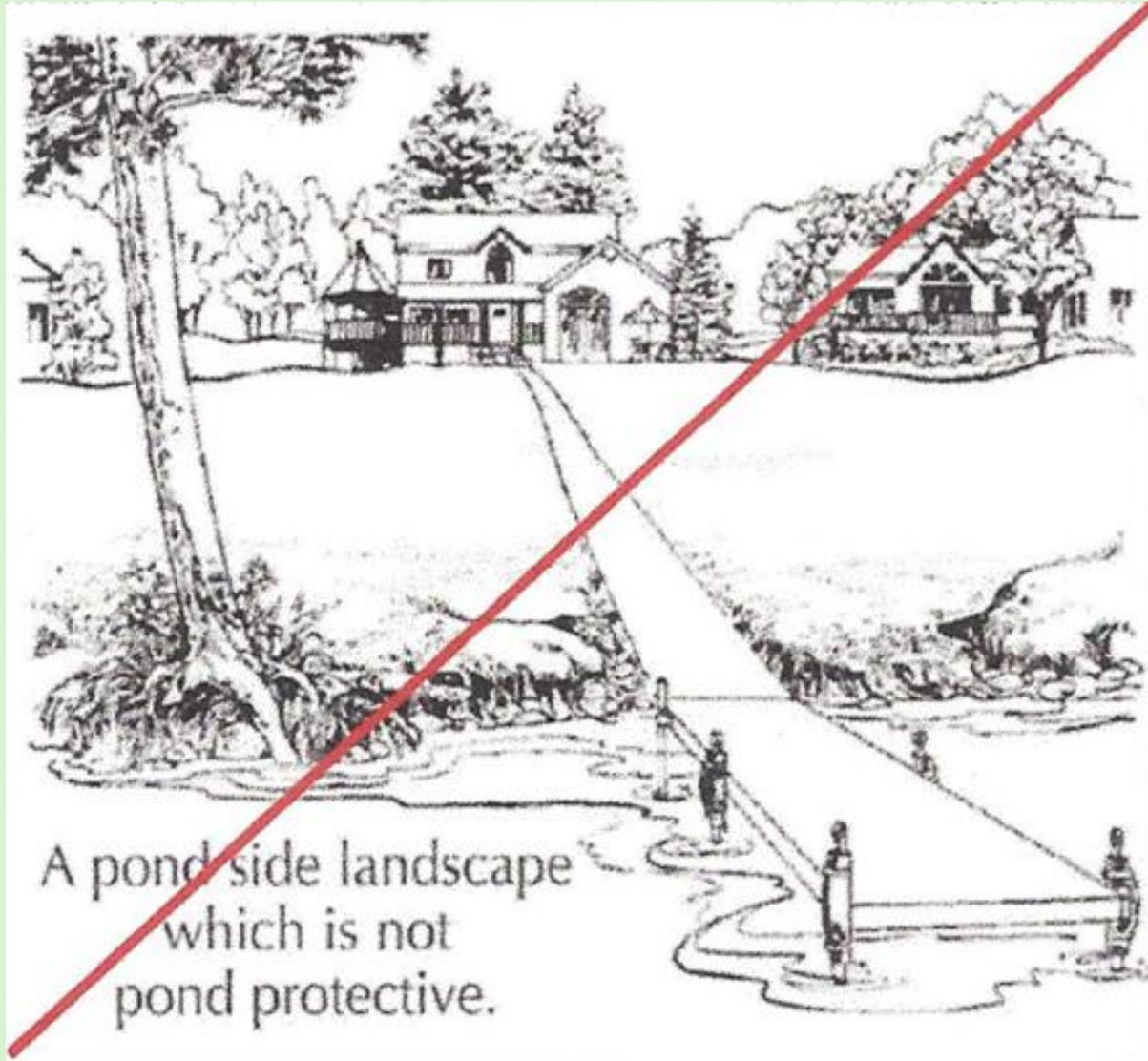


White-tinged sedge



Pennsylvania sedge

Pond-Wise Landscapes



Intentional Killing



Blacklegged Tick (*Ixodes scapularis*)



Lone Star Tick (*Amblyomma americanum*)



Dog Tick (*Dermacentor variabilis*)



<https://blog.nwf.org/2020/09/what-you-need-to-know-before-spraying-for-mosquitoes/>







oh
DEER®



To control “Plant Munchers”

Choose granular products over
sprays to protect beneficial insects
and amphibians



You CAN have a beautiful place that is healthy & thriving!

- A healthy balance in your yard is easy and beneficial to all – including YOU!
- Native plants are important for all of our wildlife – they are easier to grow & require less water, less labor
- Invasives can be contained or eliminated
- How we landscape directly impacts our watersheds, groundwater and wetlands - including our beloved ponds
- Working *with* Conservation benefits our wetlands and the water resources for us ALL
- Pesticides, herbicides, fungicides and rodenticides are all intentionally toxic - *intentionally toxic* - they even poison US
- Spraying for ticks and mosquitos poison everything in the food chain
- We can welcome and enjoy the wildlife we love - fireflies, butterflies, dragonflies, salamanders, bees, songbirds . . . and so much more!





We can create beauty *and* habitat!

Thank you!

QUESTIONS?

