


Gardening with Native Plants



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Outline

- Native, non-native, and invasive plants
- Conventional and native plant landscapes
- Benefits of gardening with native plants
- Create a native plant landscape
- Common native plants used in landscapes

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Native and Non-native Plants

- Plants existed in a given **location** at a specific point in **time**.
 - Location
 - North American native plants
 - Native to New Haven county, CT
 - Time
 - Before the first European settlement of North America
- Native plants were evolved **wisely** by **adapting** to local geography and climate in thousands of years
- Non-native plant were **introduced** to the area after the time-point

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Non-native Plants



- Plants were brought in
 - intentionally for horticultural or other uses
 - accidentally in ships' ballasts, crop seed or in soil




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Invasive Plants

- Non-native
- Rapid growth
- More competitive
- Damage local ecosystems
- Economic damages \$120 billion/year in US (USDA 2012)

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CT Invasive Plant Working Group: <https://cipwg.uconn.edu>

This list is updated annually by the CT Invasive Plants Council

CONNECTICUT INVASIVE PLANT LIST October 2018

Connecticut Invasive Plants Council **Ordered by Scientific Name**

(Statement of responsibility for January 2018. This is a list of species that have been determined by floristic analysis to be invasive or potentially invasive in the state of Connecticut, in accordance with PA 03-135. The Invasive Plants Council will generate a second list recommending restrictions on some of these plants. In developing the second list and particular restrictions, the Council will recognize the need to balance the detrimental effects of invasive plants with the agricultural and horticultural value of some of these plants, while still protecting the state's minimally managed habitats.)

In May 2014, Public Act 14-222 restricted a subset of the January 2014 list making it illegal to move, sell, purchase, transport, cultivate or distribute prohibited plants. Effective July 1, 2018, Public Act 08-82 removed the prohibition on *Pistia stratiotes*.

Ⓢ indicates restricted growth form or habitat; A = Aquatic; B = Biennial; C = Grass & Grass-like; H = Herbaceous; S = Shrub; T = Tree; V = Woody Vine

Expansions of symbols after Common Name:

(P) indicates Potentially Invasive (all other plants listed are considered Invasive in Connecticut)

* denotes that the species, although shown by scientific evaluation to be invasive, has cultivars that have not been evaluated for invasive characteristics. Further research may determine whether or not individual cultivars are potentially invasive. Cultivars are commercially available selections of a plant species that have been bred or selected for predominate desirable attributes of horticultural value such as form (dwarf or weeping forms), foliage (variegated or colorful leaves), or flowering attributes (enhanced flower color or size).

PROHIBITED BY STATE LAW column indicates prohibited status. Y = prohibited from importation, movement, sale, purchase, transportation, cultivation and distribution under CT Gen. Stat. §32a-301c; N/A = not prohibited.

† indicates species that are not currently known to be naturalized in Connecticut but would likely become invasive here if they are found to persist in the state without cultivation.

The scientific names used by the Connecticut Invasive Plants Council on the Invasive Plant List are consistent with the names used by the United States Department of Agriculture PLANTS database, accessible online at www.plants.usda.gov. The Council also maintains a list of scientific name synonyms for reference purposes.

COMMON NAME	Ⓢ	SCIENTIFIC NAME	SYNONYMS	PROHIBITED BY STATUTE†
American maple (P)	T	<i>Acer glabrum</i> Maxim.		N/A
Norway maple*	T	<i>Acer platanoides</i> L.		N/A
Sycamore maple (P)	T	<i>Acer pseudoplatanus</i> L.		Y
Cloverweed	H	<i>Aegopodium podagraria</i> L.	Bishop's weed	Y
Tree of heaven	T	<i>Ailanthus altissima</i> (Mill.) Swingle		Y
Carrot mustard	H	<i>Alliaria petiolata</i> (Mill.) Cavara & Grande		Y
Falset indigo (P)	S	<i>Amaranthus retrofractus</i> L.		Y
Portulacberry*	V	<i>Ampelopsis brevipedunculata</i> (Mill.) Tramp.	Amur peppercorn	N/A
Mugwort	H	<i>Artemisia vulgaris</i> L.	Common wormwood	N/A
Hairy piggrass (P)	S	<i>Arythron hispidus</i> (Thunb.) Makino	Small caryopsis	N/A
Common Kochia (P)	H	<i>Bassia scoparia</i> (L.) A. J. Scott	Kochia scoparia, Fireweed, Summer cypress	Y

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Conventional Landscaping

- Based functions – hedge, groundcover, lawn grass, ornamental grass, flowers, etc.
- Create to homogenization and simplification
- Easy to mass produce and distribute widely
- High maintenance cost (water, fertilizers, pesticides, labors)



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Native Landscaping

- Rely on native plants - trees, shrubs, grasses, sedges, wildflowers, etc.
- Create a sense of place in the landscape
- Longer establishment time
- Low maintenance costs



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Benefits of Gardening with Native Plants

- Low-maintenance and save money
 - Pest resistant – no pesticide
 - Drought tolerant - less or no watering



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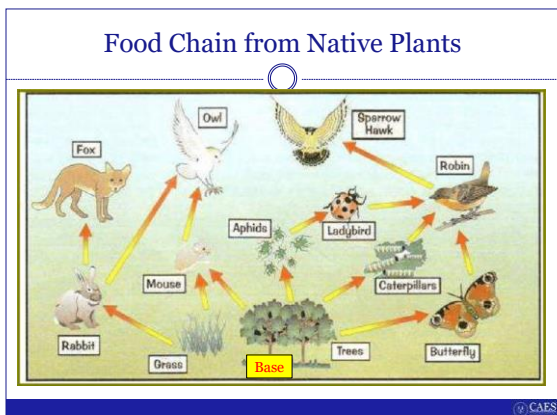
Benefits of Gardening with Native Plants

- Promote biodiversity
 - Native plant landscape – provide habitats for native organisms
 - Traditional landscape – evergreen shrubs, lawns, and non-native annual flowers



Exotic ornamentals in formal gardens

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Benefits of Gardening with Native Plants

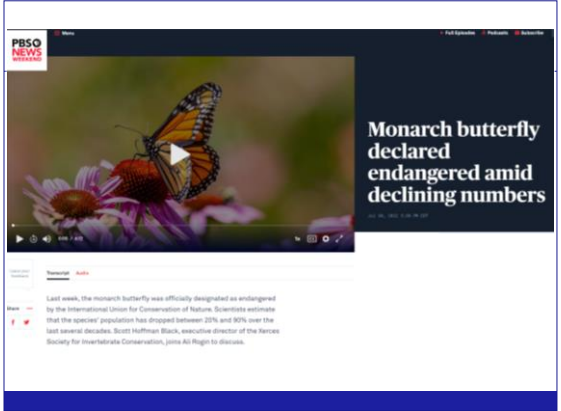
- Support pollinators
 - Native bees and butterflies
- Attract beneficial insects



Kerner blue butterfly and wild blue lupine

attracting beneficial bugs to your garden

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Benefits of Gardening with Native Plants

- Support songbirds
 - Native plants provide abundance of seed, berries, and habitat for native bird species

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Benefits of Gardening with Native Plants

- Balance habitat loss
 - Native plants have formed symbiotic relationships with native wildlife and offer the most sustainable habitat.

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Benefits of Gardening with Native Plants

- Avoid invasive plants
 - Use of non-native plants may introduce invasive plants

Kudzu Japanese knotweed

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Benefits of Gardening with Native Plants

- Protect public's health
 - No pesticide and fertilizer use

Pesticide Application

Phosphorus run-off from land

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Create a Native Plant Landscape

- What do you have?
 - Space
 - Sun path
 - Soil pH, nutrient, organic matter (soil tests)
 - Soil drainage

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Create a Native Plant Landscape

- What is your design?
 - Trees, shrubs, and herbaceous?
 - What are the right native plants?
 - When they bloom?
 - Design landscapes



Sunny/Dry Garden

Sunny/Dry Garden
Elevation

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Create a Native Plant Landscape

- Where to find native plants



Audubon
Native Plants Database

Bring more birds to your home with native plants

<https://www.audubon.org/native-plants>

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Create a Native Plant Landscape

Connecticut Native Tree and Shrub Availability List

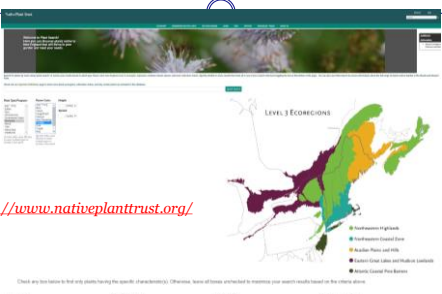


https://www.ct.gov/deep/lib/deep/wildlife/pdf_files/habitat/ntvtree.pdf

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Create a Native Plant Landscape



<http://www.nativeplanttrust.org/>

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Create a Native Plant Landscape

Native Plant Sources in Connecticut

- Colonial Seed Company, LLC (Windsor, CT)
 - <http://colonialseed.com/index.html>
- Earthtones LLC (Woodbury, CT)
 - <http://www.earthtonesnative.com/>
- Pan's Acres Nursery, LLC (Canterbury, CT)
 - <http://pans-acres-nursery-llc.sqviz.com/>

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Create a Native Plant Landscape

- Site preparation
 - From turf lawn to nativescape
 - ✦ Dig it up
 - ✦ Smothering it
 - ✦ Add organic matters



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Create a Native Plant Landscape


- Seed
 - Inexpensive
 - Greenhouse space
 - Take one or two seasons



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Create a Native Plant Landscape

- Transplants
 - Easier
 - Expensive



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Create a Native Plant Landscape


- Mulching
 - Ground leaf compost – perennials and grasses
 - Wood mulch – trees and shrubs
- Watering
 - First one to two years
 - One inch water a week
- Weed control
 - Physical removal



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Oaks (*Quercus* spp.)

- Native oak trees support over 500 species of caterpillars
- Exotic ginkgo trees only support 5 species of caterpillars




Oak Ginkgo

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Red Maple (*Acer rubrum*)

- Fast growing shade tree
- 40-70' tall
- Full sun
- Brilliant fall color
- Attract honeybees, squirrels and birds



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American Linden Tree (*Tilia americana*)

- Deciduous tree
- 60-80' tall
- Attract honeybees and birds




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Gray Birch (*Betula populifolia*)




- Fast growing tree
- Single or multi-trunked
- Sun to shade
- 35-50' tall
- Seed for bird food
- Attract butterfly and sound birds




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Common Serviceberry (*Amelanchier arborea*)




- Small tree or shrub
- 15-25' tall
- Sun to partial shade
- Spring blooms
- Summer berries
- Provide food for birds and other wildlife




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Highbush Blueberry (*Vaccinium corymbosum*)




- Woody shrub
- Edible berries
- Fall color
- Attract bees




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Butterfly Milkweed (*Asclepias tuberosa*)




- Perennial
- Full sun
- Well-drained soil
- Bloom in the summer
- Attract butterfly




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Black-eyed Susan (*Rudbeckia hirta*)




- Annual to a short-lived perennial
- Full sun
- 1-2' tall
- Bloom in the summer
- Attract bees, butterflies, and birds




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New England Aster (*Symphyotrichum novae-angliae*)




- Perennial
- Full sun
- Moist soil
- Late-season blooms
- Attract butterflies



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Trumpet Honeysuckle (*Lonicera sempervirens*)



- Deciduous perennial vine
- 3-20' long
- Full sun to partial shade
- Attract hummingbirds and butterflies

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Trumpet vs. Japanese Honeysuckle



Lonicera sempervirens *Lonicera japonica*

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Hairy Evening Primrose (*Oenothera villosa*)



- Biennial/perennial
- 2'-6' tall
- Dry to moderate moist conditions
- Yellow flowers
- Bloom in the summer
- Attract hummingbirds

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Wrinkle-Leaved Goldenrod (*Solidago rugosa*)



- Perennial
- 1-5' tall
- Yellow flowerhead
- Spread rhizomes
- Attract bees and butterflies

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Wild Ginger (*Asarum canadense*)



- Perennial
- Shade
- 6-12 in tall
- Deer resistant
- Ginger smell – root
- Propagation: seed and rhizome
- Attract pollenating insects

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Useful Links

- Native Plants Database
<https://www.audubon.org/native-plants>
- Connecticut Botanical Society
<https://www.ct-botanical-society.org/Gardens/view>
- Native Plant Trust
<https://www.nativeplanttrust.org/>
- Connecticut Native Tree and Shrub Availability List
https://www.ct.gov/deep/lib/deep/wildlife/pdf_files/habitat/nt_vtree.pdf

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