A Guide for Plants and Your Home: Understanding Native and Invasive Species

What is considered a native or indigenous plant?

Native, or indigenous plants, are plants that have evolved over thousands of years in a particular region. They have adapted to the geography, hydrology, and climate of that region. They occur in communities, meaning they have evolved together with other plants. As a result, a community of native plants provides habitat for a variety of native wildlife species.

Why should I use native plants?

Native plants provide a beautiful, hardy, drought resistant, low maintenance landscape while benefiting the environment. Once established, they save time and money by eliminating or significantly reducing the need for fertilizers, pesticides, water, and maintenance.

What is an invasive plant?

An invasive plant is a term for a plant species that has been introduced into a local area from other parts of the country or another continent, and has become an environmental weed pest. Characteristics of harmful invasive plant species include:

- The ability of the species to reproduce in large quantities
- Tolerance of many different soil and weather conditions
- Aggressive growth habit and the ability to spread rampantly
- There are no natural enemies such as insects or disease to control their populations

The Big Picture: Why is this important? How do invasive plants affect us?

Invasive plants pose a long-term threat to biodiversity, ecosystem stability, and the balance of nature on which all species depend. They spread into natural areas where they crowd out native plants and the wildlife that depend on them. These weeds disrupt ecosystem patterns and processes, such as hydrology, natural plant succession, and soil erosion.

Invasive plants are difficult to control and can be a real nuisance in landscaped areas. <u>Japanese Bamboo</u>, for example, spreads aggressively both by seed and vegetatively and is extremely difficult to manage.

Invasive species can interfere with the enjoyment of public and private conservation lands. Their tall growth habitat and ability to decrease the diversity of wild areas by creating a monoculture (solid stands where nothing else can grow), can greatly diminish scenic views and vistas. Phragmites is just one example, commonly seen impeding the view of freshwater wetlands and salt marshes.

Harmful invasive plants have the potential to adversely alter the ecological balance of the Cape's sensitive and globally unique <u>coastal plain ponds</u>. Freshwater ponds are threatened by the invasion of exotic pondweeds. One such weed, <u>hydrilla</u>, (has the potential to completely choke ponds, making it impossible for people to swim and fish. Therefore, invasive species have a negative impact, both on aesthetics and recreational activities.

Further introduction of invasive plants and a failure to manage invasive plant populations will result in the reduction of biological diversity. In addition, it will have adverse impacts on ponds and marshes by altering significant ecosystems and habitats. Ultimately, invasive plants pose a threat to fisheries, outdoor recreation, tourism, and the character of the Cape. For a list of invasive plant species for Massachusetts and Cape Cod, click here

(http://www.capecodcommission.org/regulatory/guides.htm)(http://invasives.eeb.uconn.edu/ipane/ipanespecies/current_inv.htm)

What can you do about this problem?

Seek information on invasive plants from botanical gardens, horticulturists, conservationists, and government agencies.

Semove invasive plants from your property. If they can't be removed, inquire about ways to control them, (but remember! any proposed work within a wetland or within 100 feet of a wetland requires prior authorization from the local Conservation Commission).

Don't over-fertilize – this encourages weeds.

Support public policies and programs to control invasive plants.

■Ask for native, non-invasive species when buying plants.

■Be sure your kayak, canoe, paddles and fishing boat are clear of any vegetation that may have been picked up elsewhere

On the following table, you will find some suggestions for alternatives to those invasive plants that tend to take over. These plants that will offer more to the environment, and you, once you choose to put them in place over any invasive species.

	Invaders	Alternatives
Trees	Autumn Olive (Elaeagnus umbellate)	Chokeberry (Aronia arbutifolia) Highbush cranberry (Viburnum trilobum) Witch Alder (Fothergilla gardenia) Inkberry (Ilex glabra) Winterberry (Ilex verticillata)
	Norway Maple (Acer platanoides)	Red Maple (Acer rubrum) Sugar Maple (Acer saccharum) White Oak (Quercus veluntina) American Sycamore (Platanus occidentalis) Eastern Cottonwood (Populus deltoids)
	Black Locust (Robinia pseudoacacia)	Hawthorns (Crataegus sp.) Sassafras (Sassafras albidum) Sumacs (Rhus sp.) Pitch Pine (Pinus rigida) Eastern Red Cedar (Juniperus virgininiana)
	Tree of Heaven (Ailanthus altissima)	

		Box Elder (Acer negundo) Downy Serviceberry (Amelanchier arborea) Sassafras (Sassafras albidum)
Vines	Oriental bittersweet (Celastrus orbiculatus)	American Bittersweet (Celastrus scandens) Grapes (Vitis sp.)
	Porcelainberry (Ampelopsis brevipedunculata)	Virginia Creeper (Parthenocissus quinquefolia) Virgin's Bower (Clematis virginiana)
	Black Swallowwort (Cynanchum nigrum)	Trumpet Honeysuckle (Lonicera sempervirens) Moonseed (Menispermum canadense) Greenbriar (Smilax sp.)
	Japanese Honeysuckle (Lonicera japonica)	Trumpet Honeysuckle (Lonicera sempervirens) Lowbush blueberry (vaccinium angustifolium) Gray dogwood (Cornus racemosa) Bayberry (Myrica pennsylvanica)
Shrubs (Bushy & Thorny)	Japanese Barberry (Berberis thumbergii)	Highbush Blueberry (Vaccinium corymbosum) Chokeberry (Aronia arbutifolia) Highbush Cranberry (Viburnum trilobum) Virginia Sweetspire (Itea virginica) Winterberry (Ilex verticillata)
	Bush (Amur) Honeysuckle	Serviceberry (Amelanchier spp.) Holly (Ilex) deciduous spp. Viburnum (Viburnum spp.)

Privet (Ligustrum vulgare)



Inkberry Holly (*Ilex glabra*)
Bayberry (*Myrica pennsylvanica*)
Carolina Rhododendron (*Rhododendron minus vars.*)

Scotch Broom (Cystissus scoparius)

Bayberry (Myrica pennsylvanica) Beach Plum (Prunus maritima) Mormon Tea (Ephedra spp.)

Winged Euonymus (Burning Bush) (Euonymus alatus)

Bayberry (Myrica pennsylvanica)
Highbush Blueberry (Vaccinium corymbosum)
Chokeberry (Aronia arbutifolia)
Highbush Cranberry (Viburnum trilobum)
Witch Alder (Fothergilla gardenia)
Summersweet (Clethra alnifolia)



Multiflora Rose (Rosa multiflora)

Climbing Prairie Rose (Rosa setigera)

Wetland Plants Common Reed (Phragmites)

Cattails (Typha sp.)

3

Pickerelweed (Pontederia cordata)

Purple Loosestrife (Lythrum salicaria)

Beebalm (Monarda didyma) Swamp Milkweed (Asclepias incarnate) Blue Giant Hyssop (Agastache foeniculum)

For more information on this topic contact the Conservation Office: Town of Wellfleet Conservation Office 220 West Main Street Wellfleet, MA 02667 (508) 349-0308

For additional information on the internet look to the following websites and/or organizations:

Organizations

Massachusetts Natural Heritage Program http://www.mass.gov/dfwele/dfw/nhesp/nhesp.htm New England Botanical Club http://www.rhodora.org/ Massachusetts Native Plants Committee http://www.massforesters.org/

Websites regarding Invasive Species

Invasive Plant Atlas of New England: http://invasives.eeb.uconn.edu/ipane/

Massachusetts Nursery and Landscape Association:

http://www.mnla.com/invasive_plants.htm

National Invasive Species Information Center:

http://www.invasivespeciesinfo.gov/index.shtml

New England Wildflower Society: http://www.newfs.org/conserve/invasive.htm

Northeast Aquatic Nuisance Species Panel: http://www.northeastans.org/ The Nation's Invasive Species Information: http://www.invasivespeciesinfo.gov/ Center for Invasive Plant Management: http://www.weedcenter.org/ Invasive Species: www.invasive.org

Websites regarding Native Plants

The United States National Arboretum: www.usna.usda.org Earthworks: www.earthworksboston.org

Center for Plant Conservation: www.centerforplantconservation.org National Wildlife Federation: www.nwf.org (Your Yard – Native Plant Guide)

National Parks Conservation Association: www.npca.org

Alternatives to Invasives: www.caes.state.ct.us/SpecialFeatures/NativeAlternatives.pdf New England Wildflower Society: www.newfs.org/conserve/docs/invalt2.pdf