RECOMMENDED READING


Paul Parent offers a radio program on gardening advice on a wide variety of topics Sunday mornings from 8 to 10 AM on WXTK-FM 95.1.

CREDITS

Publication Editor: Barbara Cotnam - Horticulturist/Landscape Designer - 508-430-7720

Computer Layout: Jacqueline Page - www.Great Island Software.com

Funding Acknowledgement: The Friends of Chatham Waterways, Inc., The Chatham Cultural Council, The Chatham Garden Club, and The Chatham Alliance for Preservation and Conservation are thanked for funding the 2015 printing of this educational booklet.
INTRODUCTION
The Friends of Chatham Waterways - Pond Study Group - inspired this second 2015 edition of The Green Pages. The purpose is to increase reader’s ability to identify invasive plants growing in Chatham ponds and landscapes and to further the effort to control or destroy these invasive plants. Both knowledge and action are key elements in mitigating the spread of these harmful plants. This printing includes information about why planting native trees and shrubs is a win for Chatham residents and our environment. In the summer of 2014, pond stewards collected water quality data from Stillwater, Lover’s, and Emery, White, Schoolhouse and Barclay ponds. Stewards will continue recording data so that historical comparisons can be made. Recommended best practices and readings that promote protection of our natural environment are also included. FCW hopes that all who love the natural beauty of Chatham will promote environmentally friendly ways to design and care for their landscape. This booklet is meant to be a helpful reference guide to expand your knowledge regarding actions you can take to help maintain the health of our fragile environment.

CONTENTS
Page 2 ... INTRODUCTION and CONTENTS
Pages 3 -13 ... Invasive Plants with Recommended Native Plant Listings
Page 14 ... ENVIRONMENTAL STEWARDSHIP PRACTICES
Page 15 ... INTERNET - PRINTED INFORMATION - LOCAL SOURCES
Page 16 ... RECOMMENDED READING and BOOKLET CREDITS

Why plant native species? Because they adapt to local conditions, are drought tolerant, require no fertilizer, and are not rampant spreaders. By contrast invasive plants aggressively spread, overtake healthy ecosystems and eventually kill neighboring plants- limiting bio-diversity. The recommended native plants listed are just a few of the beautiful species appropriate for Chatham.

Finally, this booklet includes environmentally friendly practices that conserve water and reduce pollutants seeping into our waters. Cape Cod has a unique sole source aquifer. Our ponds are directly connected to groundwater and the aquifer. In a sense, our ponds are windows to the aquifer. Rainfall and snow replenish ground water in our ponds. Groundwater is subsurface water located beneath the water table, in soils and geologic formations that are fully saturated. Identified threats to our pond health are lawn fertilizer runoff (especially phosphorous), discharge from storm drains, and bird feces (especially Canada Geese). Invasive aquatic species also threaten our ponds. The use of phosphorus around ponds should be regulated. A community-wide effort is needed to make a difference.

Cover photo 2010 – The Jim Nash family - Twins Chloe and Paige with Joyce Williams golden ‘Splash’ Enjoying the Chatham Conservation Foundation walking trail at Mary’s Pond.
**ENVIRONMENTAL STEWARDSHIP PRACTICES**

**LAWN DESIGN AND CARE - Practical Steps to an Environmentally Friendly Landscape.**

1. Test your lawn soil for pH - acidic or alkaline. Lawn soil should be in the 6.5 to 7 range. Using a trowel, scoop soil from several areas, and place in cup size container. If your lawn soil has low pH testing at below 6, nitrogen and phosphorous are not taken up by grass; instead it runs off into ponds or seeps into Chatham’s water table.

2. Most Chatham lawn soils need additional lime to raise the pH. Apply recommended amount and lime in the fall. Chatham Agway will test your soil pH for free. Master Gardeners offer soil pH testing for two dollars in the spring. Cape Cod Extension Office - 508-375-6690 (see p. 15)

3. If you fertilize, apply only twice a year, e.g., in the spring after Memorial Day when lawns start greening up and in the fall, after Labor Day to stimulate root growth and strength. Organic Fertilizer which is 100% slow release is best - or - use 30% to 50% slow release.

4. Measure your lawn and determine size in 1000 sq. feet. The rate of application to change the pH level of your soil is then recommended by the supplier or manufacturer.

5. To over-seed established lawn use Cape Cod grass seed that contains high % of native fescues and perennial ryegrass.

6. Mow at 3”or 3 ½”, with a sharp blade often. Use a mulching mower and leave beneficial clippings on the ground. They are a source of slow release nitrogen, help retain soil moisture and choke out weeds.

7. If you have a watering system, do not use it if there has been an inch of rainfall within the last week. During drought conditions deep water (30 minutes each zone) once a week to ... may not remain green all summer, but will green-up with the next inch or more of rain. Deep watering newly planted trees or shrubs with a Ross Root Feeder during drought is more important than watering a lawn.

Other practical steps to take are, scale down the size of your lawn by creating planting beds instead of a large lawn, plant native trees and shrubs that are drought tolerant and require no fertilizer in the beds. If you live on a pond, create a 15/20 foot buffer zone at the pond edge using native plants. Use mulch to limit run-off and retain moisture in planting beds. When raking leaves in the fall, mulch the piles with a mulching mower and use them on footpaths or planting beds. Additional environmentally friendly landscape suggestions are contained in reading material listed on page 15 and 16. For professional advice on designing with native plants, consult with a local landscaper.

**INVASIVE TREE**

**NORWAY MAPLE - Acer platanoides**

**Description** - Large deciduous shade tree reaching forty to fifty feet at maturity. This maple is distinguished from others by the milky fluid that oozes from freshly broken leaf petioles (stems). It forms a dense canopy blocking out light and prohibiting growth underneath. It leafs out and forms seeds earlier than other maples. It is tolerant of sandy, hot and dry conditions and tolerates pollutants. The cultivar ‘Crimson King’ with dark maroon leaves during the growing season is commonly planted.

**Control** - Seeds mature mid-summer.

1. Rake up fallen seeds, dry the seeds and then place in plastic bag, bake them in the sun and dispose at the * recycle center.

2. Hand pull small seedlings after a rainfall.

3. Using a trowel or spade dig up saplings removing the entire root system when the soil is dry.

4. A Weed Wrench can be rented to remove large saplings up to three inches in diameter.

5. If over three inches in diameter consider girdling. Using an axe cut a deep notch around the circumference of the trunk about six inches from ground level. This cuts off nutrients and the plant dies.

6. For mature trees to be removed hire a certified arborist

**RECOMMENDED NATIVE TREES**

**Red Maple - Acer rubrum** ‘Red Sunset’ or ‘October Glory’

**American Hornbeam - Carpinus caroliniana**

**Red Oak - Quercus rubra**

**Chestnut Oak - Quercus prinus**

**Swamp White Oak - Quercus bicolor**

**American Sweetgum - Liquidambar styraciflua** ‘Cherokee’
BLACK LOCUST - *Robinia pseudoacacia*

**Description** - Large tree growing to sixty feet and giving filtered shade with pinnately compound leaves. Leaves turn yellowish in fall. New stem growth often has spines. White flowers in spring, seed pods mature in October. Self sows readily forming colonies. Native of southern Appalachian Mountains where its hardwood is prized. On Cape Cod it has replaced thousands of acres where oaks and pines once grew.

**Control** - See Control for Norway Maple

---

RECOMMENDED NATIVE TREES

Thornless Honey Locust - *Gleditsia triacanthos* ‘Shademaster’
Basswood - *Tilia americana*
White Oak - *Quercus alba*
Red Oak - *Quercus rubra*
American Yellowwood - *Cladrastis kentukea* ‘Rosea’

**Medium Height**
Carolina Silverbell - *Halesia tetrapetala* ‘Wedding Bells’
Dogwood - *Cornus alternifolia*
Fringetree - *Chionanthus virginicus*
Ironwood - *Carpinus caroliniana*
Franklinia Tree - *Franklinia alatamaha*
Shadbush - *Amalanchier x grandiflora* ‘Autumn Sunset’

**Note:** To avoid cedar/apple rust disease, do not plant shadbush near Eastern Red Cedar.

---

SWITCH GRASS - *Panicum virgatum* ‘Shenandoah’
Four feet tall by eighteen inches wide. Noted for its red tipped foliage in summer and its red and orange blades in the fall. The plant is drought tolerant once established.

SWITCH GRASS - *Panicum virgatum* ‘Northwind’
Height, four to five feet. Spread, two to three feet. Blue/green summer color blades, silvery flowers in late summer. In late fall blades turn yellowish wheat color. This grass remains upright through any winter weather and is drought tolerant once established.

SWITCH GRASS - *Panicum virgatum* ‘Cloud Nine’
Height, six feet with a spread of two to three feet. Large vase-shaped form, late summer blooms in clouds of silvery fawn color that remain attractive in winter. Severe weather will knock down this grass.

DUNE GRASS - *Panicum amarum* ‘Dewey Blue’
Similar to beach grass pictured below, but bluer and more upright. Three feet high by one foot wide. Tolerant of salt, heat, drought, wind, and humidity. The Blue gray color in summer turns wheat color in the fall. Excellent for dune plantings.

PRAIRIE DROPSEED - *Sporobolus heterolepis*
One and a half feet tall by one foot wide. Fine textured clump forming warm season grass with green arching foliage. Flowers are pinkish/tan in late summer on stalks to three feet tall. Foliage turns golden/orange in late fall. Tan all winter. Good for dry hot areas. Slow to establish, then very long lived. Tolerates a wide range of soils but prefers dry rocky soil. Good for edging a garden or planting a hillside. At Oyster Pond in Chatham, Prairie Dropseed edges the right side entrance.
EVERGREEN WILD GINGER - *Asarum shuttleworthii*
Six inches high by one foot spread. Woodland plant with heart shaped often marbled leaves. Purple flowers hide beneath leaves in spring.

ALUMROOT - *Heuchera americana*, *H. villosa* and *H. sanguinea*
Two foot height by one and a half foot spread. Clump forming plant that grows on sunny edges of the woodland. White flowers appear in early summer. Many cultivars are available in the trade.

WILD GERANIUM - *Geranium maculatum*
A woodland flower found in sunny moist or dry shaded sites. One foot height by one and a half foot spread. Pink to lavender flowers in early summer with 5 petals. Nice companion plant to the Christmas Fern.

::: : RECOMMENDED NATIVE GRASSES

PENNSYLVANICA SEDGE - *Carex pensylvanica*
Height, eight to ten inches. Spread, one foot. Delicate, arching, semi-evergreen blades. Does well in full sun but tolerant of shady conditions. Often found in dry woods among oaks. Use as a border or groundcover in shady areas. Deer will not dine on this plant.

BLAZE LITTLE BLUESTEM - *Schizachyrium scoparium* ‘Blaze’
Two to three feet tall by fifteen inches wide. Vivid red fall foliage, fades to deep pink in winter. Easily grown and tolerant of a wide range of conditions. Useful in a native wildflower garden.

LITTLE BLUESTEM - *Schizachyrium scoparium* ‘Prairie Blues’

::: : INVASIVE TREE

SYCAMORE MAPLE - *Acer pseudoplatanus*
**Description** - Large tree to sixty feet with grey bark, flaking to expose orange/brown inner bark. Fall leaf color is brownish/yellow.

**Control** - Seeds mature in September. See Norway Maple control.

::: : RECOMMENDED NATIVE TREES

Black Gum or tupelo - *Nyssa sylvatica*
Eastern Red Cedar - *Juniperus virginiana*
Sassafras - *Sassafras albidum*
Pin oak - *Quercus palustris*
Sorrel Tree - *Oxydendron arboreum*

::: : INVASIVE SHRUB

BURNING BUSH - *Euonymus alatus*
**Description** - Height up to twenty feet. Easily pruned. Known for its bright red fall leaf color.

**Control** - Prune late spring before the shrub sets seed. Bag clippings. Bake in sun and dispose at the *recycle center.* Also See Norway Maple control - #1 through #5

::: : RECOMMENDED NATIVE SHRUBS

Chokeberry - *Aronia arbutifolia* ‘Brilliantissima’ related species are *Aronia melanocarpa* and *Aronia x prunifolia*

Summersweet Clethra - Clethra alnifolia ‘Hummingbird’ and cultivar C. ‘Ruby Spice’

Cinnamon Clethra - Clethra acuminata
**INVASIVE SHRUB**

**JAPANESE BARBERRY - Berberis thunbergii**

**Description** - Many small and large cultivars are available. All have thorns. Leaves out early in the spring. Small yellow flowers in spring. Leaf color green or maroon and some varieties variegated. Usually bright reddish foliage in the fall with vivid red berries. It is one of the most widespread invasive plants in New England and should not be planted, although many cultivars are still commercially available.

**Control** - Remove plant and roots with a spade before fruit is set. Bake the plant in the sun, bag and dispose of at the *recycle* center.

---

**RECOMMENDED NATIVE SHRUBS**

Dwarf Fothergilla - *Fothergilla gardenii* ‘Mt. Airy’, ‘Woodbridge Elite’

*Hydrangea arborescens* ‘Annabelle’ - white or pink


American Beautyberry - *Callicarpa americana*

---

**INVASIVE SHRUB**

**AUTUMN OLIVE - Elaeagnus umbellata**

**Description** - Large shrub. Leaves are green with pale green undersides often with spines on the branches. Flowers are light yellow in spring. Numerous large clusters of small red berries in mid summer-ripen in the fall. Rapidly spread by seed. Fixes nitrogen and able to grow in adverse conditions including saline.

**Control** - Cut down shrub in spring before flowers bloom. Remove entire root system, repeat throughout growing season. The plant is tenacious and to eradicate, one must be vigilant.

---

**RECOMMENDED NATIVE GROUND COVERS**

**BEARBERRY - Arctostaphylos uva-ursi**

Evergreen leathery leaves in the heath family. Likes sun and sandy nutrient-poor soil. Benefits from a symbiotic association with mycorrhizal fungi in the soil by an ability to use available nitrogen. Two to four inches high and two feet or more spread. White flowers in spring and red berries in the fall. Drought tolerant once established.

**BROOM CROWBERRY - Corema conradii**

Likes sun. Ten to twenty inches high by one to three feet wide. Evergreen stiff needle-like leaves. Dark red small blooms in early spring that resemble heath. Bearberry is a good companion groundcover.

**TRAILING ARBUTUS - Epigaea repens**

Two to three inches high by one foot spread. Evergreen leaves. Spring flowers are white or pink. A woodland plant in the heath family. It is the Massachusetts state flower.

**CLIFF GREEN - Paxistima canbyi**

Likes part sun or shade. One foot high by three foot spread. Evergreen leaves. Spring flowers are white or pink. A carefree woodland plant native to Virginia.

**CHRISTMAS FERN - Polystichum acrostichoides**

Likes part sun or shade. One foot high by two foot spread. Evergreen woodland ground cover. Adaptable to wet or dry conditions once established.
**::: ::: INVASIVE PERENNIAL

DAME’S ROCKET - *Hesperis matronalis*

**Description** - A showy biennial or short-lived perennial, two to three feet tall. Resembles a garden phlox but has toothed leaves and flowers with four petals rather than five. Blooms May to August with white, pink or lavender flowers. Be wary of wild flower seed mixes they may contain Dame’s Rocket.

**Control** - Hand dig removing the entire root system. Bake in the sun, bag and dispose of at the * recycle center.

**::: ::: RECOMMENDED NATIVE PERENNIALS

Checkerbloom, Malva - *Sidalcea malviflora*

Carolina Phlox - *P. carolina* or

Wild Blue Phlox - *P. divaricata*

**::: ::: INVASIVE PERENNIAL

YELLOW FLAG, YELLOW IRIS - *Iris pseudacorus*

**Description** - Showy European native grows along pond edges, stream banks and moist areas. It has colonized in wild wetlands where it can displace native irises. Distinguished because it readily spreads both from seed and division.

**Control** - This plant may still be commercially sold. Avoid the plant. If you have yellow flag in your yard, dig up the entire plant, dry in the sun, bag and dispose of at the * recycle station.

**::: ::: RECOMMENDED NATIVE PERENNIALS

Northern Blue Flag Iris - *Iris versicolor*, ‘Kermesina’

**::: ::: RECOMMENDED NATIVE SHRUBS

Large Fothergilla - *Fothergilla major*

Highbush Blueberry - *Vaccinium corymbosum*

Hydrangea quercifolia - ‘Oak Leaf Hydrangea’, ‘Alice’ and ‘Snow Queen’

Coastal leucothoe - *Leucothoe axillaris*

Fragrant Sumac - *Rhus aromatic*a

**::: ::: INVASIVE SHRUB

BORDER PRIVET *Ligustrum obtusifolium*

**Description** - Twelve feet tall. Used for screen or hedge row. Flowers in mid-June. Small dark berries ripen in September and persist in winter.

**Control** - See Norway Maple control - #1 through #5.

**::: ::: RECOMMENDED NATIVE SHRUBS

Large Fothergilla - *Fothergilla major*

Highbush Blueberry - *Vaccinium corymbosum*

Hydrangea quercifolia - ‘Oak Leaf Hydrangea’, ‘Alice’ and ‘Snow Queen’

Coastal leucothoe - *Leucothoe axillaris*

Fragrant Sumac - *Rhus aromatic*a

**::: ::: INVASIVE SHRUB

BORDER PRIVET *Ligustrum obtusifolium*

**Description** - Twelve feet tall. Used for screen or hedge row. Flowers in mid-June. Small dark berries ripen in September and persist in winter.

**Control** - See Norway Maple control - #1 through #5.

**::: ::: RECOMMENDED NATIVE SHRUBS

Large Fothergilla - *Fothergilla major*

Highbush Blueberry - *Vaccinium corymbosum*

Hydrangea quercifolia - ‘Oak Leaf Hydrangea’, ‘Alice’ and ‘Snow Queen’

Coastal leucothoe - *Leucothoe axillaris*

Fragrant Sumac - *Rhus aromatic*a

**::: ::: INVASIVE SHRUB

BORDER PRIVET *Ligustrum obtusifolium*

**Description** - Twelve feet tall. Used for screen or hedge row. Flowers in mid-June. Small dark berries ripen in September and persist in winter.

**Control** - See Norway Maple control - #1 through #5.

**::: ::: RECOMMENDED NATIVE SHRUBS

Large Fothergilla - *Fothergilla major*

Highbush Blueberry - *Vaccinium corymbosum*

Hydrangea quercifolia - ‘Oak Leaf Hydrangea’, ‘Alice’ and ‘Snow Queen’

Coastal leucothoe - *Leucothoe axillaris*

Fragrant Sumac - *Rhus aromatic*a

**::: ::: INVASIVE SHRUB

BORDER PRIVET *Ligustrum obtusifolium*

**Description** - Twelve feet tall. Used for screen or hedge row. Flowers in mid-June. Small dark berries ripen in September and persist in winter.

**Control** - See Norway Maple control - #1 through #5.

**::: ::: RECOMMENDED NATIVE SHRUBS

Large Fothergilla - *Fothergilla major*

Highbush Blueberry - *Vaccinium corymbosum*

Hydrangea quercifolia - ‘Oak Leaf Hydrangea’, ‘Alice’ and ‘Snow Queen’

Coastal leucothoe - *Leucothoe axillaris*

Fragrant Sumac - *Rhus aromatic*a

**::: ::: INVASIVE SHRUB

BORDER PRIVET *Ligustrum obtusifolium*

**Description** - Twelve feet tall. Used for screen or hedge row. Flowers in mid-June. Small dark berries ripen in September and persist in winter.

**Control** - See Norway Maple control - #1 through #5.

**::: ::: RECOMMENDED NATIVE SHRUBS

Large Fothergilla - *Fothergilla major*

Highbush Blueberry - *Vaccinium corymbosum*

Hydrangea quercifolia - ‘Oak Leaf Hydrangea’, ‘Alice’ and ‘Snow Queen’

Coastal leucothoe - *Leucothoe axillaris*

Fragrant Sumac - *Rhus aromatic*a

**::: ::: INVASIVE SHRUB

BORDER PRIVET *Ligustrum obtusifolium*

**Description** - Twelve feet tall. Used for screen or hedge row. Flowers in mid-June. Small dark berries ripen in September and persist in winter.

**Control** - See Norway Maple control - #1 through #5.

**::: ::: RECOMMENDED NATIVE SHRUBS

Large Fothergilla - *Fothergilla major*

Highbush Blueberry - *Vaccinium corymbosum*

Hydrangea quercifolia - ‘Oak Leaf Hydrangea’, ‘Alice’ and ‘Snow Queen’

Coastal leucothoe - *Leucothoe axillaris*

Fragrant Sumac - *Rhus aromatic*a

**::: ::: INVASIVE SHRUB

BORDER PRIVET *Ligustrum obtusifolium*

**Description** - Twelve feet tall. Used for screen or hedge row. Flowers in mid-June. Small dark berries ripen in September and persist in winter.

**Control** - See Norway Maple control - #1 through #5.

**::: ::: RECOMMENDED NATIVE SHRUBS

Large Fothergilla - *Fothergilla major*

Highbush Blueberry - *Vaccinium corymbosum*

Hydrangea quercifolia - ‘Oak Leaf Hydrangea’, ‘Alice’ and ‘Snow Queen’

Coastal leucothoe - *Leucothoe axillaris*

Fragrant Sumac - *Rhus aromatic*a

**::: ::: INVASIVE SHRUB

BORDER PRIVET *Ligustrum obtusifolium*

**Description** - Twelve feet tall. Used for screen or hedge row. Flowers in mid-June. Small dark berries ripen in September and persist in winter.

**Control** - See Norway Maple control - #1 through #5.

**::: ::: RECOMMENDED NATIVE SHRUBS

Large Fothergilla - *Fothergilla major*

Highbush Blueberry - *Vaccinium corymbosum*

Hydrangea quercifolia - ‘Oak Leaf Hydrangea’, ‘Alice’ and ‘Snow Queen’

Coastal leucothoe - *Leucothoe axillaris*

Fragrant Sumac - *Rhus aromatic*a

**::: ::: INVASIVE SHRUB

BORDER PRIVET *Ligustrum obtusifolium*

**Description** - Twelve feet tall. Used for screen or hedge row. Flowers in mid-June. Small dark berries ripen in September and persist in winter.

**Control** - See Norway Maple control - #1 through #5.

**::: ::: RECOMMENDED NATIVE SHRUBS

Large Fothergilla - *Fothergilla major*

Highbush Blueberry - *Vaccinium corymbosum*

Hydrangea quercifolia - ‘Oak Leaf Hydrangea’, ‘Alice’ and ‘Snow Queen’

Coastal leucothoe - *Leucothoe axillaris*

Fragrant Sumac - *Rhus aromatic*a

**::: ::: INVASIVE SHRUB

BORDER PRIVET *Ligustrum obtusifolium*

**Description** - Twelve feet tall. Used for screen or hedge row. Flowers in mid-June. Small dark berries ripen in September and persist in winter.

**Control** - See Norway Maple control - #1 through #5.

**::: ::: RECOMMENDED NATIVE SHRUBS

Large Fothergilla - *Fothergilla major*

Highbush Blueberry - *Vaccinium corymbosum*

Hydrangea quercifolia - ‘Oak Leaf Hydrangea’, ‘Alice’ and ‘Snow Queen’

Coastal leucothoe - *Leucothoe axillaris*

Fragrant Sumac - *Rhus aromatic*a

**::: ::: INVASIVE SHRUB

BORDER PRIVET *Ligustrum obtusifolium*

**Description** - Twelve feet tall. Used for screen or hedge row. Flowers in mid-June. Small dark berries ripen in September and persist in winter.

**Control** - See Norway Maple control - #1 through #5.

**::: ::: RECOMMENDED NATIVE SHRUBS

Large Fothergilla - *Fothergilla major*

Highbush Blueberry - *Vaccinium corymbosum*

Hydrangea quercifolia - ‘Oak Leaf Hydrangea’, ‘Alice’ and ‘Snow Queen’

Coastal leucothoe - *Leucothoe axillaris*

Fragrant Sumac - *Rhus aromatic*a

**::: ::: INVASIVE SHRUB

BORDER PRIVET *Ligustrum obtusifolium*

**Description** - Twelve feet tall. Used for screen or hedge row. Flowers in mid-June. Small dark berries ripen in September and persist in winter.

**Control** - See Norway Maple control - #1 through #5.

**::: ::: RECOMMENDED NATIVE SHRUBS

Large Fothergilla - *Fothergilla major*

Highbush Blueberry - *Vaccinium corymbosum*

Hydrangea quercifolia - ‘Oak Leaf Hydrangea’, ‘Alice’ and ‘Snow Queen’

Coastal leucothoe - *Leucothoe axillaris*

Fragrant Sumac - *Rhus aromatic*a

**::: ::: INVASIVE SHRUB

BORDER PRIVET *Ligustrum obtusifolium*

**Description** - Twelve feet tall. Used for screen or hedge row. Flowers in mid-June. Small dark berries ripen in September and persist in winter.

**Control** - See Norway Maple control - #1 through #5.
**JAPANESE HONEYSUCKLE - Lonicera japonica**

*Note:* Both shrub & vine honeysuckles are invasive. L. morrowii, L. x bella, L. Maackii, L. Tatarica.

**Description** - Leaves opposite, fast growing woody vine up to thirty feet. White flowers bloom in the spring. Leaves stay green well into winter. Berries ripen in September.

**Control** - Cut off vines at ground level and cut again at arms reach. When vine dies off, pull down and dispose of at the *recycle center. Also see Norway Maple control - #1 through #4.

**RECOMMENDED NATIVE VINES**

- Virginsbower - *Clematis virginiana*
- Rock Clematis - *Clematis columbiana*
- Climbing Hydrangea - *Decumaria barbara*

**ORIENTAL BITTERSWEET - Celastrus orbiculatis**

**Description** - Twining vine climbing to thirty feet or higher. Yellow fruits open to reveal red seeds in August and September. Roots are orange colored. The vine strangles, deforms or kills host trees.

**Control** - Cut off vines at ground level and cut again at arms reach. When vine dies off, pull down and dispose of at the *recycle center. Also see Norway Maple control - #1 through #5.

**RECOMMENDED NATIVE PERENNIALS**

- Spike Gayfeather - *Liatris spicata*, many cultivars available.
- Milkweed - *Asclepias syriaca* or *A. specios*
- Phlox - *Phlox carolina* - Two to three feet high by one and one half feet wide. Resistant to powdery mildew and spider mites and one of the best phlox for hot climates. Pink flowers in summer.
- Obedient Plant - *Physostegia virginiana* - Height, three to four feet and a spread of one foot. A clump forming plant with spreading roots. Flowers with spikes of snapdragon-like flowers in late summer and early autumn.
- Wild Lupine - *Lupinus perennis* - Height, two and a half feet by a spread of one and a half feet. An erect plant with fanlike leaves divided into leaflets. Blue or pink flowers appear on tall spikes in early summer.

*At the recycle center, dispose of invasive perennial clippings in the grass and leaves area. Woody material disposal is at the branch and twigs area. A fee for woody plant material will be collected at the gatehouse.*

**PURPLE LOOSESTRIFE - Lythrum salicaria, L. virgatum**

**Description** - Two to three feet tall purple spikes of long blooming flowers all summer. Each plant can produce up to two million seeds. Once established in wetlands it is difficult to control. Grows in shallow fresh water. Once commercially available and popular because of its long bloom period. Do not purchase the so-called sterile varieties!

**Control** - If you have this plant in your yard, remove it, roots and all! Bake in the sun, bag it and dispose of at the *recycle center. Researchers are testing biological controls.

**RECOMMENDED NATIVE VINES**

- Leatherflower - *Clematis viorna*
- American Wisteria - *Wisteria frutescens*