

COMMON INVASIVE PLANTS OF MASSACHUSETTS

Identification, Ecology, and Control



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What Is An Invasive Plant?

- Non-Native to New England
- Spreads Rapidly and Aggressively
- Displaces Native Flora
- Persists in Natural Landscapes
- Approximately 100 Species in New England Are Invasive
- See Species Catalogue in IPANE (Invasive Plant Atlas of New England) Database

Movement of Invasive Plants

- Garden Introductions
- Accidental Transport
- Habitat Disturbance, Roads, Trails
- Birds, Wildlife, Livestock
- Movement by Water
- Other Vectors: Machinery, Humans
- Absence of Natural Predators and Pathogens

Categories of Invasive Species

- Trees
- Shrubs
- Vines
- Herbaceous Forbs (Broad-Leaf Flowers)
- Graminoids (Grasses and Grass-like Plants)
- Aquatic Plants

Methods of Invasive Plant Control

- Manual
- Mechanical
- Chemical
- Biological
- Livestock
- Fire



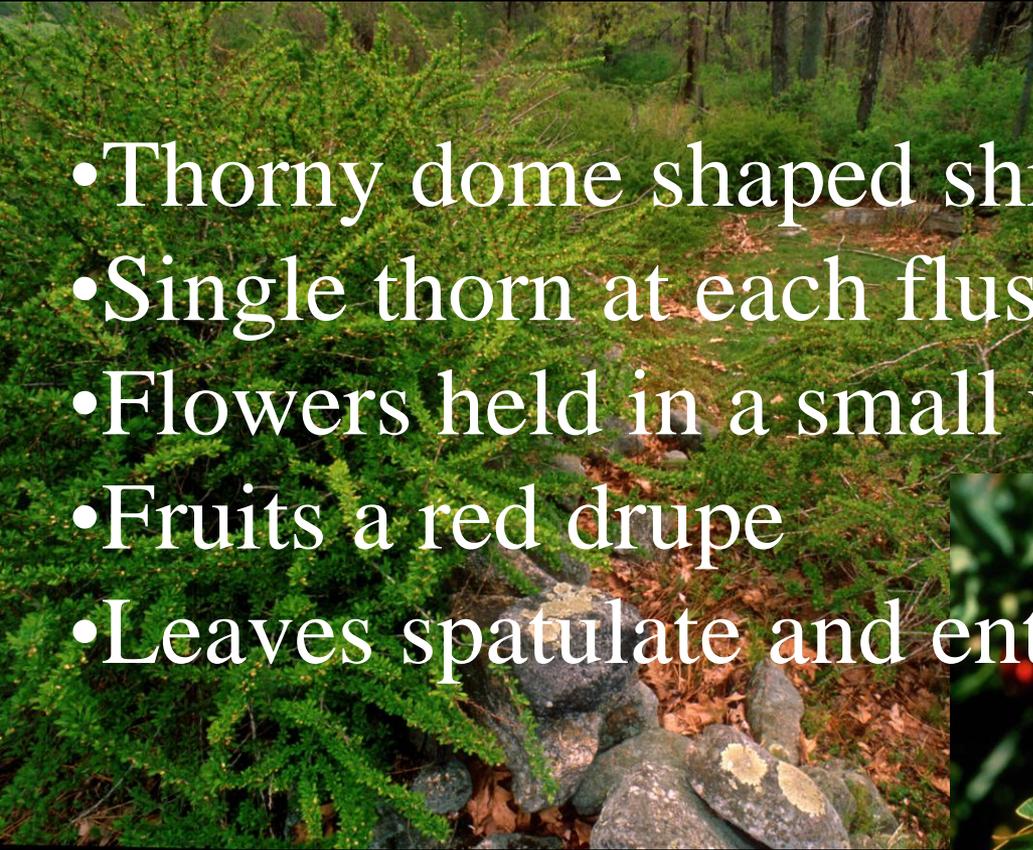
- broadly winged samaras
- milky sap
- stout twigs
- broad leaves, green on both sides
- winter buds with only 4-6 scales

Acer platanoides – Norway
Maple

Berberis thunbergii

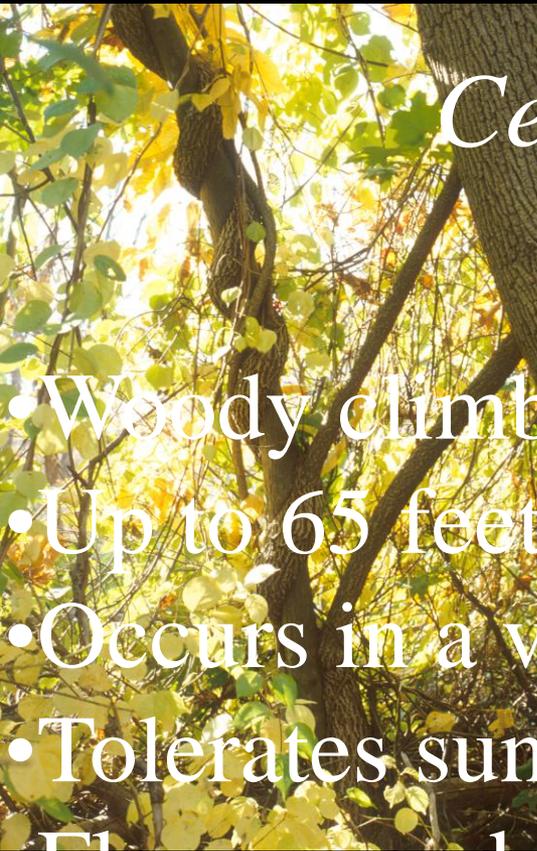
- Thorny dome shaped shrub
- Single thorn at each flush of leaves
- Flowers held in a small upside down umbel
- Fruits a red drupe
- Leaves spatulate and entire

Japanese barberry

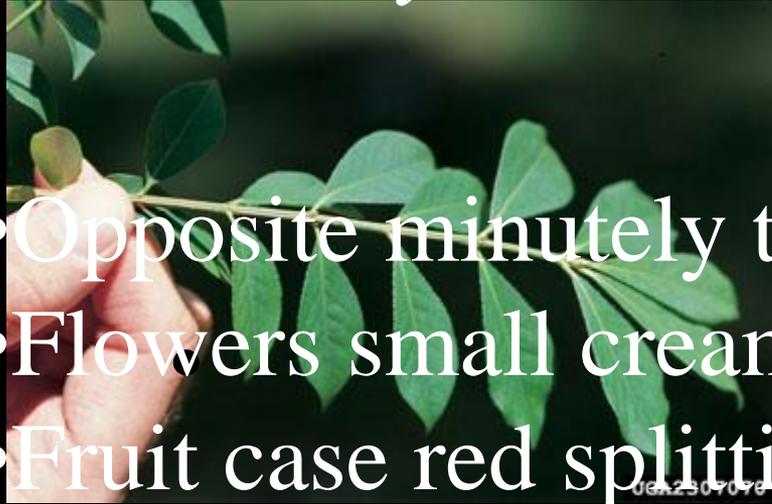


Celastrus orbiculatus – Oriental bittersweet

- Woody climbing strangling vine
- Up to 65 feet tall
- Occurs in a variety of habitats
- Tolerates sun or shade, but more prolific in sun
- Flowers and fruits produced in leaf axils
- Native bittersweet flowers and fruits only at the
branch tips



Euonymus alatus – burning bush



- Opposite minutely toothed leaves
- Flowers small cream colored inconspicuous
- Fruit case red splitting open to reveal an orange fruit

- Stems often winged on mature individuals
- Foliage turns bright red in autumn
- Foliage in shade situations does not turn bright red, and often quickly fades to cream



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- Small tree/shrub, 15 to 20 ft.
 - Hard to distinguish
 - Leaves entire and egg-shaped
 - Flowers white, May-September
 - Fruit blue-black, June-October
 - Bark marked with white lenticels
 - Can confuse with alders or cherries
 - both have toothed leaves
 - Roots red

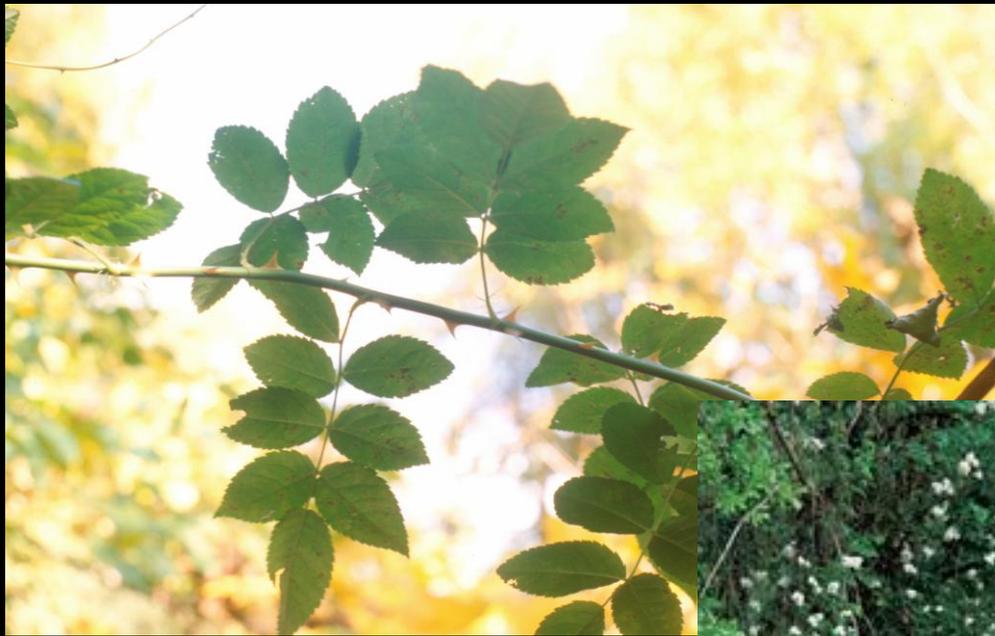
Frangula alnus – glossy

buckthorn

Lonicera morrowii – Morrow's honeysuckle

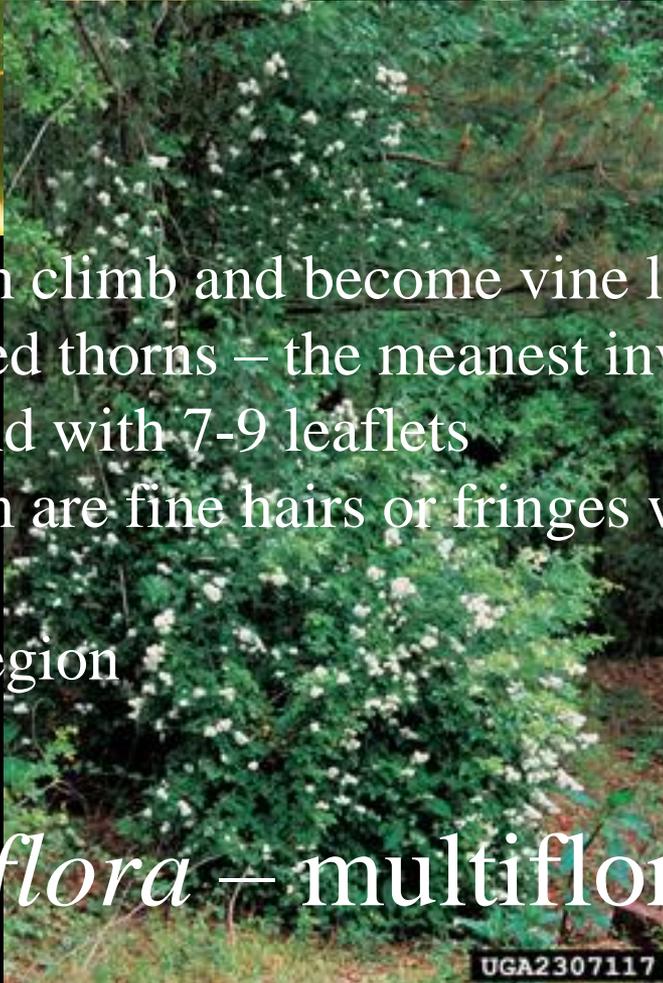
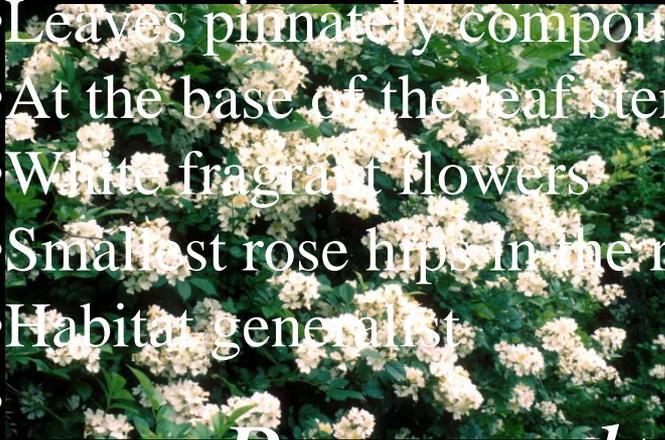
- Leaves ovate to elliptic
 - Fruit red
 - Bark gray and older stems shreddy in appearance
 - Stems hollow
- Shrub to 15 feet, very weak and twiggy in appearance



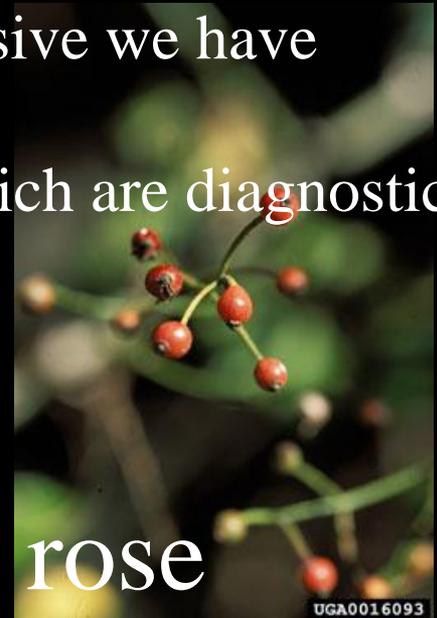


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- Fountain shaped shrub, can climb and become vine like
- Stems with wicked recurved thorns – the meanest invasive we have
- Leaves pinnately compound with 7-9 leaflets
- At the base of the leaf stem are fine hairs or fringes which are diagnostic
- White fragrant flowers
- Smallest rose hips in the region
- Habitat generalist



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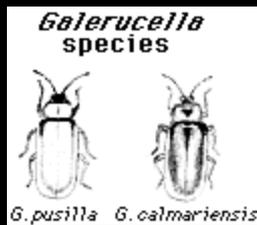
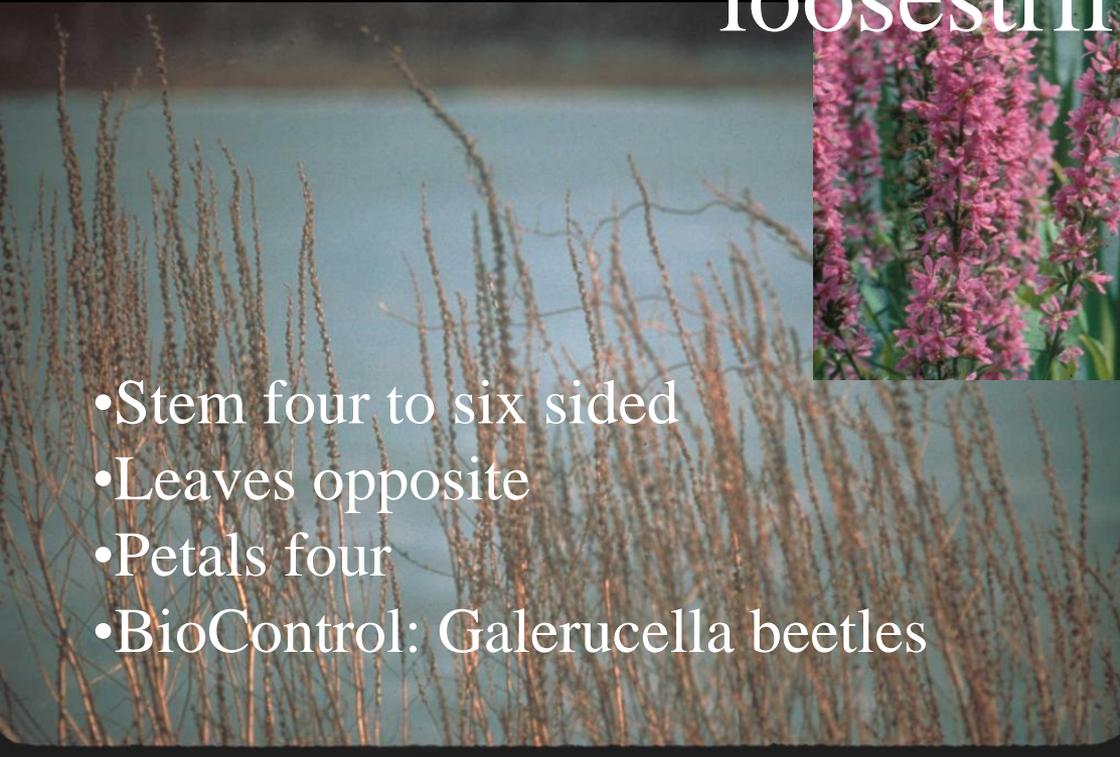
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Rosa multiflora – multiflora rose

Lythrum salicaria – purple loosestrife



- Stem four to six sided
- Leaves opposite
- Petals four
- BioControl: Galerucella beetles



Phragmites australis – common reed

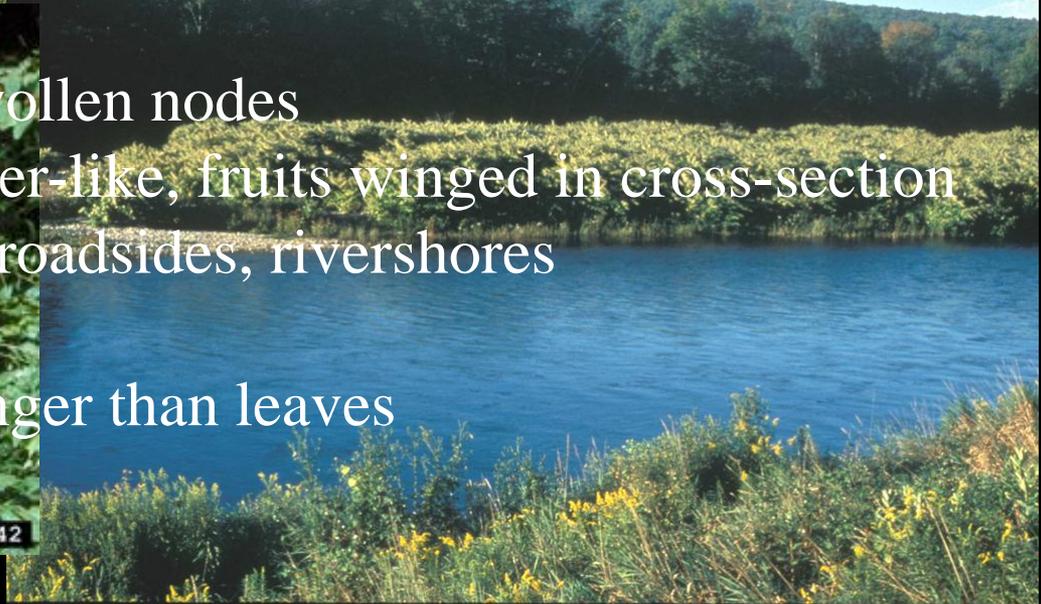
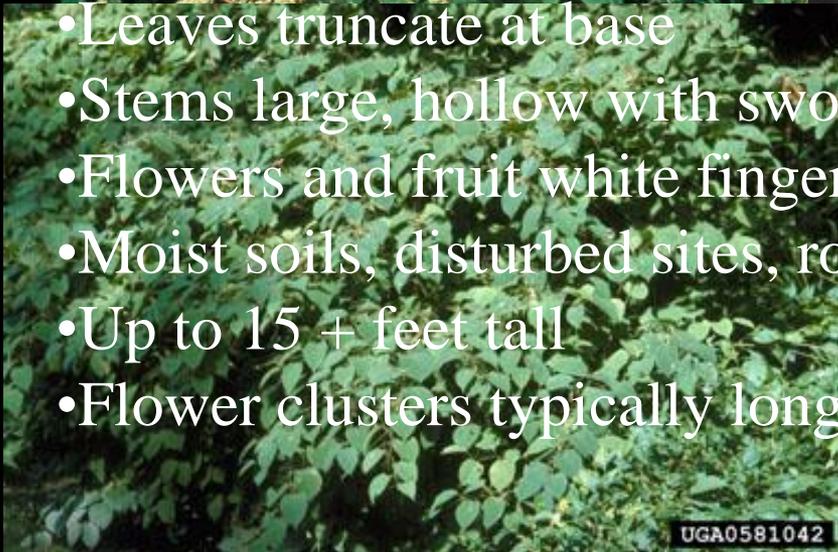
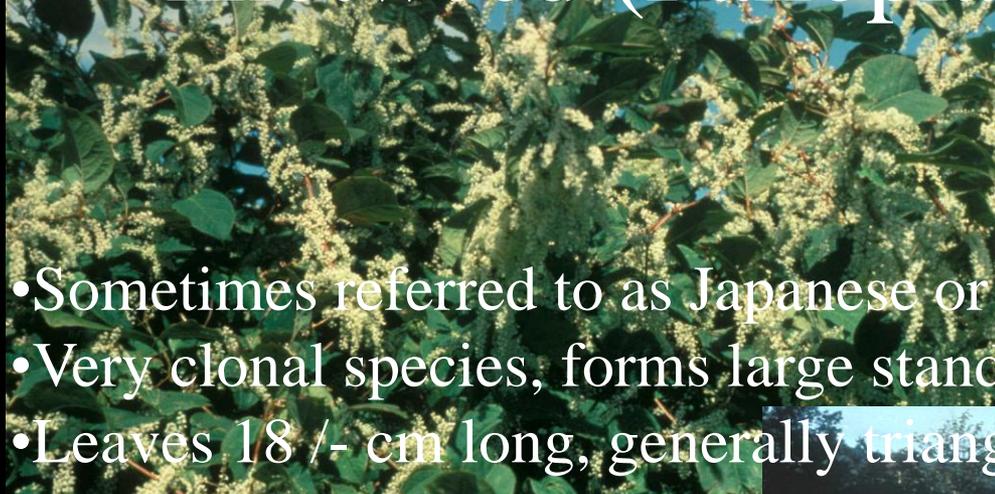
- Large grass, can reach 25 feet
- Forms huge vegetative clones
- Easily identifiable
- Hollow stems
- Native and Non-Native Strains

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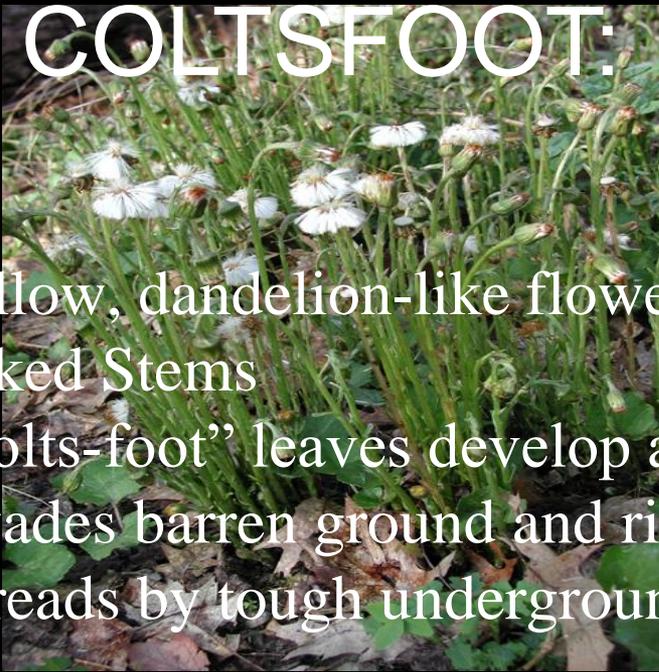
Polygonum cuspidatum – Japanese knotweed (*Fallopia japonica*)

- Sometimes referred to as Japanese or Mexican bamboo
- Very clonal species, forms large stands
- Leaves 18 +/- cm long, generally triangular in shape overall
- Leaves truncate at base
- Stems large, hollow with swollen nodes
- Flowers and fruit white finger-like, fruits winged in cross-section
- Moist soils, disturbed sites, roadsides, rivershores
- Up to 15 + feet tall
- Flower clusters typically longer than leaves



COLTSFOOT: *Tussilago farfara*

- Yellow, dandelion-like flowers bloom in early spring
- Naked Stems
- “Colts-foot” leaves develop after flowers
- Invades barren ground and rich fen wetlands
- Spreads by tough underground stems

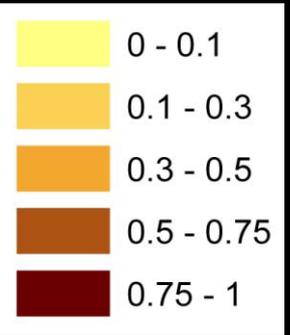
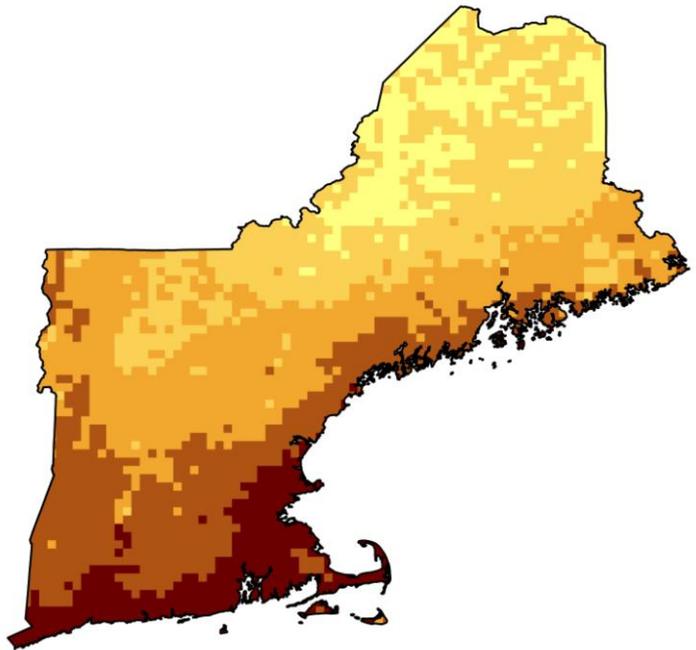
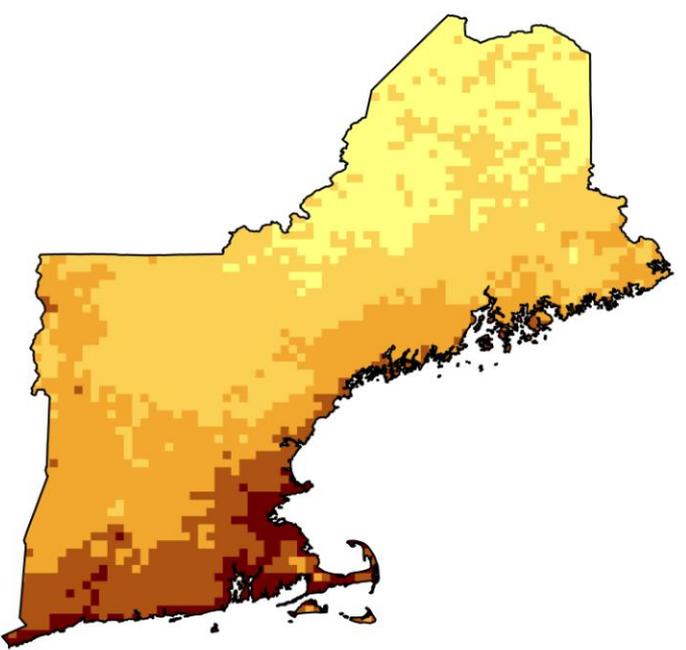
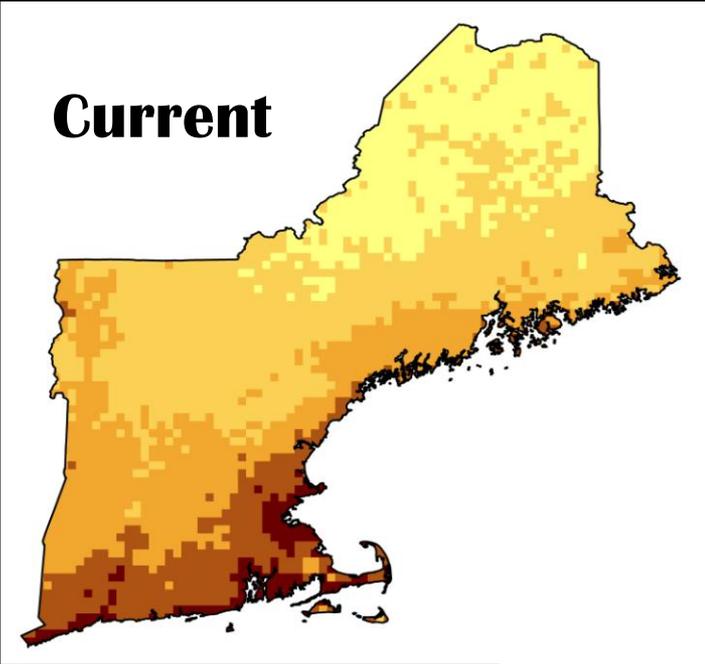


Potential distribution - Climate change

Celastrus orbiculatus

Canadian model
☺☺ temp, =
precip

Hadley model
☺temp,
☺precip





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