

# Common Invasive Plants of Deerfield, Massachusetts

## *A Citizen's Identification Guide*

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## **Introduction**

This guide has been prepared by the Deerfield Conservation Commission to help residents identify common invasive plant species found in our community. Early identification and management of invasive plants is crucial for protecting Deerfield's natural areas, biodiversity, and ecosystem health.

Invasive plants are non-native species that spread aggressively, displacing native plants and disrupting local ecosystems. Out of approximately 2,263 plant species in Massachusetts, about 725 (32%) are non-native, with 72 species recognized as invasive or potentially invasive by the Massachusetts Invasive Plant Advisory Group (MIPAG). This list covers many common invasive species in our area, but is not exhaustive. We highly recommend seeking professional guidance for dealing with invasive species infestations.

## **Impacts of Invasive Plants**

Invasive species are one of the greatest threats to the integrity of our natural communities. Invasive Species:

- Out-compete native plants for resources
- Reduce biodiversity
- Degrade wildlife habitat
- Alter soil chemistry and hydrology
- Cost millions of dollars annually in management and lost ecosystem services

In Deerfield and the Connecticut River Valley, invasive plants threaten our forests, wetlands, meadows, and even backyard gardens.

## **Species Profiles**

## Japanese Knotweed - *Reynoutria japonica* (formerly *Fallopia japonica*)



*Figure 1. Japanese Knotweed - Close Up of Japanese Knotweed stems showing purple speckles and nodes*



*Figure 2. Japanese Knotweed - Full Plant Japanese Knotweed showing characteristic bamboo-like stems and growth*

**Status:** Highly Invasive

**Description:**

- Height: 3-8 feet tall (occasionally taller in moist fertile soils)
- Stems: Hollow, bamboo-like with purple flecks/speckles
- Leaves: Heart-shaped to broadly oval, 3-6 inches long
- Flowers: Small, greenish-white in branched clusters (late summer)

**Habitat:** Roadsides, streambanks, wetlands, disturbed areas

**Key ID Features:**

- Bamboo-like appearance with distinct nodes
- Zigzag growth pattern - Forms dense thickets
- Dies back in winter leaving brown stalks

**Similar Native Plants:** None

- very distinctive appearance

## Oriental Bittersweet - *Celastrus orbiculatus*



Figure 3. Oriental Bittersweet vine showing distinctive yellow/orange fruit



Figure 4. Full vine bittersweet showing girdling of host trees

**Status:** Highly Invasive

**Description:**

- Type: Deciduous woody vine
- Length: 20-60 feet (vine length when climbing into tree canopies)
- Leaves: Rounded, glossy, alternate, 2-5 inches
- Fruit: Yellow capsules opening to reveal red berries

**Habitat:** Forest edges, roadsides, gardens, climbing trees

**Key ID Features:**

- Vines twist around host plants
- Distinctive yellow/orange fruit with red berries
- Can girdle and kill trees
- Older vines can be 4+ inches in diameter

**Similar Native Plants:** American Bittersweet (*C. scandens*)

- less common, fruit only at branch tips

## Multiflora Rose - *Rosa multiflora*



*Figure 5. Multiflora Rose - Close-up of Multiflora Rose showing thorns and leaf structure*



*Figure 6. Multiflora Rose - Full Plant Multiflora Rose showing arching growth habit and dense thicket formation*

**Status:** Invasive

**Description:**

- Type: Thorny deciduous shrub
- Height: 3-6 feet (occasionally to 10 feet when climbing on other vegetation)
- Leaves: Compound with 5-11 leaflets
- Flowers: White to pink, fragrant clusters
- Fruit: Small red rose hips

**Habitat:** Fields, forest edges, roadsides, pastures

**Key ID Features:**

- Arching canes with recurved thorns
- Fringed stipules at leaf base
- Forms impenetrable thickets
- Prolific seed producer

**Similar Native Plants:** Native roses have straight thorns and lack fringed stipules

## Garlic Mustard - *Alliaria petiolata*



Figure 7. Garlic Mustard - Garlic Mustard showing characteristic leaves and white flowers



Figure 8. Garlic Mustard infestation fully covering forest floor, crowding out native species

### **Status: Highly Invasive**

#### **Description:**

- Type: Biennial herb
- Height: 1-3 feet (second year)
- Leaves: Heart-shaped with toothed edges
- Flowers: Small, white, 4-petaled clusters
- Odor: Garlic smell when crushed

**Habitat:** Forest understory, edges, trails, yards

#### **Key ID Features:**

- First year: Low rosette of kidney-shaped leaves
- Second year: Tall flowering stalk
- Garlic odor distinctive
- Flowers early spring (April-May)

**Similar Native Plants:** Violets (first year rosettes)

## Purple Loosestrife - *Lythrum salicaria*



Figure 9. Purple Loosestrife - Close Up of Purple Loosestrife flower spike



Figure 10. Purple Loosestrife - Full Plant Purple Loosestrife showing tall purple flower spikes in wetland habitat

**Status:** Highly Invasive

**Description:**

- Type: Herbaceous perennial
- Height: 2-6 feet (occasionally taller in wetlands)
- Stems: Square, woody at base
- Leaves: Lance-shaped, opposite or whorled
- Flowers: Purple-magenta spikes

**Habitat:** Wetlands, pond edges, ditches, wet meadows

**Key ID Features:**

- Showy purple flower spikes (June-September)
- Square stems
- Can form dense stands
- Up to 30 stems from single rootstock

**Similar Native Plants:** Native loosestrifes have fewer flowers

## Common Buckthorn - *Rhamnus cathartica*



Figure 11. Common Buckthorn - Close-up of Common Buckthorn showing leaves and berries



Figure 12. Common Buckthorn - Full Plant Common Buckthorn showing overall growth form and dense foliage

**Status:** Invasive

**Description:**

- Type: Deciduous shrub/small tree
- Height: 10-20 feet (sometimes to 25 feet)
- Leaves: Oval, glossy, sub-opposite
- Fruit: Black berries
- Bark: Gray-brown, rough

**Habitat:** Forests, edges, old fields, yards

**Key ID Features:**

- Leaves stay green late into fall
- Small thorns at branch tips
- Berries cause digestive upset
- Forms dense understory

**Similar Native Plants:** Native Viburnums have opposite leaves

## Autumn Olive - *Elaeagnus umbellata*



*Figure 13. Autumn Olive - Close Up Close-up of Autumn Olive showing speckled red berries*

**Status:** Invasive

**Description:**

- Type: Deciduous shrub
- Height: 6-15 feet (occasionally to 20 feet)
- Leaves: Silvery-green, alternate
- Flowers: Fragrant, pale yellow
- Fruit: Speckled red berries

**Habitat:** Fields, coastal areas, roadsides

**Key ID Features:**

- Silvery scales on leaves and twigs
- Nitrogen-fixing (alters soil)
- Fragrant flowers in spring
- Abundant fruit in late summer

**Similar Native Plants:** None with silvery foliage



*Figure 14. Autumn Olive - Full Plant Autumn Olive showing characteristic shrub form*

## Norway Maple - *Acer platanoides*



Figure 15. Norway Maple - Close Up Close-up of Norway Maple leaves and characteristic wide-spreading seed pairs



Figure 16. Norway Maple - Full Tree Norway Maple showing tree form and dense canopy

**Status:** Invasive

**Description:**

- Type: Deciduous tree
- Height: 40-70 feet
- Leaves: 5-lobed, similar to Sugar Maple
- Sap: Milky white
- Seeds: Wide-spreading pairs

**Habitat:** Forests, yards, urban areas

**Key ID Features:**

- Milky sap when leaf stem broken
- Dense shade eliminates understory
- Horizontal seed wings

**Similar Native Plants:** Sugar Maple (clear sap, narrower seed angle)

## Japanese Barberry - *Berberis thunbergii*



*Figure 17. Japanese Barberry - Close-up of Japanese Barberry showing single thorns at nodes and small clustered leaves*



*Figure 18. Japanese Barberry - Full Shrub Japanese Barberry showing typical shrub form and dense thicket formation*

**Status:** Highly Invasive

**Description:**

- Type: Thorny deciduous shrub
- Height: 2-6 feet (rarely up to 8 feet if long-established)
- Leaves: Small, spoon-shaped clusters
- Thorns: Single at nodes
- Fruit: Bright red berries

**Habitat:** Forests, edges, landscaping

**Key ID Features:**

- Single sharp spine at each node
- Leaves in clusters
- Red berries persist into winter
- Creates tick habitat

**Similar Native Plants:** None - no native barberries in region

## Burning Bush - *Euonymus alatus*



Figure 19. Burning Bush - Close-up of Burning Bush showing distinctive corky "wings" on stems



Figure 20. Burning Bush - Full Shrub Burning Bush

**Status:** Invasive

**Description:**

- Type: Deciduous shrub
- Height: 5-8 feet (sometimes up to 10+ feet in old plantings)
- Stems: Corky "wings" on branches
- Leaves: Opposite, elliptical
- Fall color: Brilliant red

**Habitat:** Forests, edges, landscaping

**Key ID Features:**

- Distinctive corky wings on stems
- Spectacular red fall color
- Small red fruit with orange seeds
- Spreads into forests from yards

**Similar Native Plants:** Native *Euonymus* lack winged stems

## Mile-a-Minute Vine - *Persicaria perfoliate*



*Figure 21. Mile-a-Minute Vine showing its key identification features: triangular leaves, distinctive bright blue fruit, and downward pointing barbs.*



*Figure 22. Mile-a-Minute - Full Vine Mile-a-Minute vine showing dense mat growth and triangular leaves*

### **Status: Emerging Invasive**

#### **Description:**

- Type: Annual herbaceous vine
- Growth: Up to 6 inches/day
- Length: Typically 10-20 feet in a season
- Leaves: Triangular, light green
- Stems: Barbed/prickly
- Fruit: Metallic blue berries

**Habitat:** Open areas, edges, disturbed sites

#### **Key ID Features:**

- Triangular leaves
- Barbs on stems and leaves
- Cup-shaped leafy structures
- Rapid growth rate

**Similar Native Plants:** Native tearhumbs have different leaf shapes

## **Swallowwort** - *Cynanchum louiseae* (Black Swallowwort) and *Cynanchum rossicum* (Pale Swallowwort)



*Figure 23. Swallowwort - Close Up Close-up of Black Swallowwort showing dark purple star-shaped flowers*



*Figure 24. Swallowwort - Full Plant Black Swallowwort forming dense monoculture stand*

### **Status: Highly Invasive**

#### **Description:**

- Type: Herbaceous perennial vine
- Height/Length: 3-6 feet tall, vines can spread 6-10 feet
- Leaves: Opposite, glossy, oval to heart-shaped, 2-4 inches
- Flowers: Small, star-shaped; black swallowwort has dark purple/black flowers, pale swallowwort has pink to maroon flowers
- Fruit: Slender pods 2-3 inches long, similar to milkweed

**Habitat:** Fields, forest edges, disturbed areas, gardens, roadsides

#### **Key ID Features:**

- Twining vine growth habit
- Opposite shiny leaves
- Small clustered flowers in leaf axils
- Milkweed-like seed pods with fluffy seeds

**Similar Native Plants:** Native milkweeds have milky sap; swallowworts have clear sap

## Common Reed (Phragmites) - *Phragmites australis*



Figure 25. Common Reed (*Phragmites*) - Close-up of *Phragmites* showing feathery seed head plume



Figure 26. Common Reed (*Phragmites*) - Full Stand Invasive *Phragmites australis* forming dense monoculture in wetland

**Status:** Invasive

**Description:**

- Type: Perennial grass
- Height: 8-12 feet typical (occasionally to 15 feet in fertile wetlands)
- Leaves: Long, flat, gray-green
- Flowers: Purple-brown plumes
- Spreads: Via rhizomes

**Habitat:** Wetlands, shorelines, ditches

**Key ID Features:**

- Forms dense monocultures
- Tall feathery seed heads
- Tan stems persist in winter
- Blue-gray leaf color

**Similar Native Plants:** Native *Phragmites* less aggressive, smaller

## Quick Reference Guide

### By Growth Form

**Trees:** - Norway Maple

**Shrubs:** - Multiflora Rose - Common Buckthorn - Autumn Olive - Japanese Barberry - Burning Bush

**Vines:** - Oriental Bittersweet - Mile-a-Minute - Swallowwort

**Herbaceous Plants:** - Japanese Knotweed - Garlic Mustard - Purple Loosestrife - Common Reed

### By Habitat

**Wetlands:** - Purple Loosestrife - Common Reed - Japanese Knotweed

**Forests:** - Garlic Mustard - Oriental Bittersweet - Norway Maple - Japanese Barberry

**Open Areas:** - Multiflora Rose - Autumn Olive - Mile-a-Minute - Swallowwort

### Seasonal ID Calendar

**Spring (April-May):** - Garlic Mustard flowering - Multiflora Rose leafing out - Japanese Knotweed emerging

**Summer (June-August):** - Purple Loosestrife flowering - Japanese Knotweed full height - Mile-a-Minute growing rapidly - Swallowwort flowering and pod formation

**Fall (September-October):** - Oriental Bittersweet fruit visible - Burning Bush red foliage - Autumn Olive berries

**Winter (November-March):** - Multiflora Rose hips - Japanese Barberry berries - Bittersweet vines obvious

## What You Can Do

### Prevention

- Learn to identify invasive plants
- Don't plant invasives in your yard
- Use native plants in landscaping
- Clean boots and equipment when moving between sites

### Management

- Professional treatment and removal strongly recommended

## Native Alternatives for Landscaping

Instead of invasive plants, consider these native alternatives:

- Instead of Burning Bush: Highbush Blueberry (*Vaccinium corymbosum*), Red Chokeberry (*Aronia arbutifolia*)
- Instead of Japanese Barberry: Winterberry Holly (*Ilex verticillate*), Inkberry (*Ilex glabra*)
- Instead of Norway Maple: Sugar Maple (*Acer saccharum*), Red Maple (*Acer rubrum*)
- Instead of Autumn Olive: Spicebush (*Lindera benzoin*), Elderberry (*Sambucus canadensis*)
- Instead of Multiflora Rose: Prickly Wild Rose (*Rosa acicularis*), Purple Poppy Mallow (*Callirhoe involucrate*), Halberd-Leaved Rose Mallow (*Hibiscus laevis*)

## Resources and Contacts

Deerfield Conservation Commission

### Contact:

Timothy Eve-Cowles

Conservation Agent

ConservationAgent@town.deerfield.ma.us

### Reporting Invasive Species

- [EDDMapS](#)
- [iNaturalist](#)
- [MIPAG: Massachusetts Invasive Plant Advisory Group](#)

### Additional Resources

- [Franklin Conservation District](#)
- [Mass Audubon](#)
- [Massachusetts Prohibited Plant List](#)

### Professional Help

For large infestations or species requiring herbicide treatment, it is **strongly recommended** that you hire licensed professionals.

*This guide was prepared by the Deerfield Conservation Commission to help protect our local ecosystems. Contact the conservation commission for questions or to be put in contact with professionals who manage invasive species.*

